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Vol. XIV, No. 3, July, 1953

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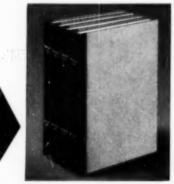
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July, 1953

Volume XIV, Number 3

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A Program for Staff Reading

Dr. Muller is director of libraries, Southern Illinois University.

TELL-READ librarians seem to be in danger of becoming extinct. This trend might be related to the widely accepted policy of not permitting any protracted library staff reading on paid library time, with the exception of the reading of professional library literature, such as book reviews, catalogs, and articles on library techniques. It has been suggested that the responsibility for preventing the extinction of well-read librarians rests with the library administrator rather than with his staff. However, the policy that all library staff reading must be done outside library walls seems rather deeply entrenched. Hence, any library administrator who dared to deviate from that policy by requiring his staff to read during working hours would invite censure from his superiors.

For the sake of clarifying the issue, let us assume that a head librarian did decide to take a chance and proceeded to establish an official reading program for his staff. Let us assume that the program will be limited to the professional staff, with no differentiation between those assigned to reader services and technical processing services, respectively.

It is conceivable that a reading specialist or a committee composed of top-ranking library staff members would select the most significant titles from the point of view of the actual or desirable reading interests of library users. Such titles might then be assigned to the staff for reading. A visible file catalog or posters might make it known to the public what titles have been read and

by whom on the library staff. If a library user wished to obtain a first-hand reaction to a book, he would attempt to locate the librarian who appeared in the file or catalog as having read the book. Staff-written book annotations could be posted in the library and staff members would be urged to seek opportunities for giving book talks both in the library and before organized groups.

Such immediate service, however, represents only a minor benefit of a reading program. Published reviews written by professional reviewers will often be superior in quality to annotations written by members of a library staff. The more important result of a staff reading program is less tangible than providing immediate service. What the program would create is a staff of librarians who read and who know books and who may thus be in a better position to stimulate reading in others. Through genuine enthusiasm for some of the books they have personally read, they may infect library patrons with a desire for reading; and it is the book-steeped atmosphere thus engendered that would also save the soul of many a library employee and encourage others to join the profession.

Cost

One-fourth of the available professional staff time, although obviously an arbitrary fraction, is probably the minimum time to be set aside for consecutive reading if results are to be noticeable. Under the plan whereby the reading is distributed among all members of the professional staff, each would spend no more than thirty hours a week performing regular library duties, such as book selection, cataloging, reference serv-

ice, scheduling and supervising of clerks, publicity, preparing bibliographies, securing inter-library loans, preparing statistical reports, analyzing circulation trends, promoting audio-visual materials, etc. The remaining ten hours of a normal work week would be devoted to reading behind the scenes in the most comfortable surroundings, and completely undisturbed.

If the present work load of a library cannot be reduced, the introduction of a staff reading program, consuming 25% of staff time, would require an increase of about 33% in the professional salary budget of the library. For instance, a library employing six librarians would have to add two librarians if every member of the enlarged staff were required to spend onefourth of her or his scheduled library time as a participant in the officially sanctioned reading program. Assuming that the library spends around 40% of its total budget for salaries of professional librarians, the required increase in the total library budget would amount to about 13%. Budget divisions vary, of course, from library to library. In college and university libraries, the spending of 50 to 60% of the total library budget for salaries and wages is considered normal.1 Of this percentage, about two-thirds would be spent for professional salaries and one-third for clerktypists and student help. An official reading program would cover only the professional staff. In public libraries, the percentage of the budget assigned to professional salaries is probably lower than in college libraries of the same size. Hence the percentage increase required to pay for an official reading program would probably be less than 13% of the total budget in public libraries.

As long as a forty-hour week is ac-

cepted as the standard for most professional library employees, the creation of a well-read professional library staff requires either a substantial curtailment of the general library program or a sharp increase in the library staff.² Urging librarians to read more during their leisure hours is not likely to be too fruitful and can hardly be defended as a sound personnel policy.

It goes without saving that most librarians have always devoted a much larger than average portion of their leisure hours to the pursuit of reading. Such reading. however, should not be of the kind that is required as essential equipment for satisfactory work performance. A children's librarian should not be required to peruse children's books at home; a business librarian should not have to spend her leisure hours browsing through books and magazines related to business. Leisure hours should be devoted to the kind of reading from which the librarian derives personal pleasure; and such reading is not necessarily related to the requirements of the job.

Library administrators are unrealistic if they think they can maintain a literate library staff without added financial support. Whether an increase of 13% in a library's budget is too high a price to pay is, of course, for the governing authority to decide. It is up to the library administrator, however, to make the necessary recommendation.

In the past, when increased funds have become available, librarians as well as their professional associations have usually been interested in extension of library service. The time may soon be here when efforts will instead be devoted to qualitative improve-

Guy R. Lyle, The Administration of the College Library, 2nd ed., New York, H. W. Wilson, 1949, p.

² According to Economic Status of Library Personnel, 1949 (Chicago: American Library Association, 1950), pp. 11 and 78, 68 per cent of all professional library employees in the U.S. observed a scheduled work week of 38 to 40 hours; 21 per cent worked fewer than 18 hours a week; and 11 per cent worked 41 hours or more a week. The 40-hour week was the most common single schedule in libraries not connected with schools or

ment of existing library service rather than, the cultivation of new territory. An authorized staff reading program, costly as it is, may be expected to raise the quality of library service.

Benefits

Lest illusions be created, it is well to be as specific as possible about the benefits to be derived from a staff reading program. If we assume a work year of 48 weeks, 10 hours of reading a week add up to 480 hours a year for each professional librarian. How much reading could be accomplished in 480 hours would depend on the kinds of books read. At a reading rate of 40 pages an hour for ordinary fiction and assuming an average length of 400 pages per book, 48 books of fiction could perhaps be read in a year. For nonfiction, the number of books might be between 30 and 35. A selection that included nonfiction as well as fiction might result in an average of about 40 books a year read on library time.

At first sight, this figure of 40 books a year does not seem very impressive in relation to the annual output of American publishers.3 However, if 40 books are multiplied by the number of staff members in a given library, it is conceivable that a plan could, be worked out whereby all the most noteworthy new books could be read by even a relatively small staff, provided that no two staff members would read the same book on library time. Our hypothetical staff of eight professional librarians could read 320 different books a year, which would cover quite a respectable range of literary form and subject matter. The details of assignment would, of course, have to be worked out differently for each different library.

The conscientious individual librarian, who reads 40 books on library time, could not reasonably be expected to read more than another 60 books on his own time; such reading would be of the unrequired and non-occupational type, which Irwin Edman recently extolled in the Fifteenth Bowker Lecture.*

Estimates as to how much an individual working person can read during a year vary. Dean John E. Burchard, an ex-librarian, recently estimated that a person reading 12 hours every week, 3 hours an evening, 4 evenings a week, could digest 100 volumes a year, although he indicated that the average professional person probably devotes perhaps two-fifths of such reading time or the equivalent of 40 volumes, to professional reading and news magazines.5 Thus 60 volumes would seem to be a fair estimate for independent recreational and cultural The average college-educated person probably reads fewer than 60 volumes a year by far; but many librarians, dedicated as they are professionally to the promotion of the pursuit of recreational and educational reading, might be inclined to read more than the average. By carefully observing a reading schedule during their leisure hours, they could be expected to digest 60 volumes a year in addition to the 40 volumes read on library time, thus chalking up a total reading record of 100 volumes a year.

A total of 100 volumes a year represents a reasonable rather than a maximum estimate of a person's likely consumption of reading matter. A figure of 500 volumes a year was reported for Donald Gordon, a professional book appraiser of the world's largest book wholesale firm for over 20

¹ The total number of new books, exclusive of new editions, published in the U. S. was 8,634 in 1950 and 8,460 in 1949, as reported in *Publishers' Weekly*, 159: 240 (Jan. 20, 1951).

^{*}Publishers' Weekly, 158:1852 (Oct. 21, 1950): "The inability, and lack of time, to read is especially to be noticed," Professor Edman said, "among those whose professional concern is with books."

*"Multum in Parvo" in M. I. T. Library Annual, 1948, p. 11.

years. Gordon has managed to go through at least one book and often two books, every day. Librarians could hardly be expected to have so high an absorptive capacity, since they do have a few other chores to do than reading.

It is anybody's guess as to how many books are read by the average collegeeducated person in the United States a year. But it is doubtful whether he currently reads more than two or three volumes a month, or about 30 volumes a year. At this rate, a librarian, reading a total of 100 volumes a year, would read well over three times as much. After 25 years of employment, a librarian would have outstripped the average college-educated person by about 1750 volumes (see Table I). Thus by the time he approached the ripe age of 50, he could truly claim to be well-read on the basis of quantity alone (2500) and in contrast to his college-educated fellow citizens who had read less (750 volumes).

If authorized library reading programs should become universal, even those librarians who wished to read on their own time no more than the average college-educated person (30 volumes a year) could be expected to accumulate a reading record

of 70 volumes a year. At the age of 50, such a librarian would have read 1000 volumes more than the average college-educated person, or a total of 1750 volumes, which is probably several times as many as an average high school graduate reads in a life-time.

In stressing quantity, we should not underestimate the importance of quality of consumption. It would be assumed that the books had been carefully read and with adequate comprehension, that the bulk of the titles would fall outside the categories of mystery, detective, Western stories, and light romances, and that, in public libraries, a fair balance between good fiction and nonfiction had been maintained. Being college graduates, professional librarians could be expected to be judicious in the choice of their reading matter for their hours of leisure.

As for the 40 books a year to be read on library time, careful selection is imperative. At the average 1952 salary of \$3,768 a year for a professional librarian, the cost of the reading program to the library would be \$942 per librarian per year or \$23.55 per book read. Such a relatively high unit cost can be defended only if books are se-

Table I Estimated Reading Records

	Volun	nes Read Ar	nually	Total Volumes	Gain over
Type of Reader	f Reader During On B	Read after 25 years	average college graduate after 25 years		
Average College Graduate	30	-	30	750	-
No Reading Program Authorized Non-Ambitious Librarian Ambitious Librarian	30 60	=	30	750	750
Reading Program Authorized Non-Ambitious Librarian Ambitious Librarian	30 60	40 40	70 100	1,750	1,000
Professional Book Reviewer	-	500	500	12,500	11,750

⁴ Merle Miller, "? ! ! aba? ? ?" Saturday Review of Literature, 34:20-21 (Feb. 10, 1951).

⁹ The median monthly salary of professional librarians in the U. S., in effect March 1, 1952, was reported to be \$314, which would amount to \$3,768 per year if the

lected according to a clearly formulated policy appropriate to the library in question. The difficulty of selecting the relevant titles from the multitude of publications has probably been one of the major hurdles in the inauguration and operation of any staff reading program. However, this difficulty should constitute a challenge to the alert administrator rather than an unsurmountable obstacle.

About fifty years ago, it was quite popular to quote the paradoxical epigram, "The librarian who reads is lost."8 The epigram is still occasionally quoted among librarians today to cover up the deep frustration felt as a result of the lack of the time for reading among librarians.0 It has been suggested that the phrase be reworded to read: "The librarian is lost who does not read wisely."10 Both the original and the rephrased versions reflect the common experience of librarians who are overwhelmed by the never-ending flow of publications; librarians cannot possibly expect to digest very much of it. It is perhaps natural to react to such an unmanageable situation by feeling that, no matter how much an individual librarian may read, he can at best cover only an infinitesimal fraction of the total publishing output or of the acquisitions of

any given library. The larger the library, the greater the frustration, until a point is reached where reading almost nothing at all seems, superficially, to have no deleterious effect on his assigned library duties. The little reading an ambitious library assistant may find time for during his leisure hours does not seem to have any very noticeable beneficial effect on his work performance in a busy library, either. From such observations it is easy enough to conclude that, since reading seems to make so little tangible difference, librarians might as well dispense with it altogether, or, at best, read no more than the average collegeeducated citizen. According to the testimony of librarians and in the absence of any published protestations to the contrary, such appears to be the state of affairs among the vast majority of librarians today.

The day may come when library administrators will recommend a work schedule for staff members which will allow for a liberal amount of official reading under competent supervision as part of the regular work week. It was shown that such a revolutionary change can be accomplished only by curtailing the current program of a given library or by increasing the library budget.

On the surface, such a change will not produce any immediate spectacular results. Over the years, however, the effect on service to the public, staff competence, staff morale, and recruiting for the profession of librarianship is certain to be deep and farreaching.

librarian worked 12 months in a year (Hazel B. Timmerman, "Library Salaries, 1952," ALA Bulletis, 46: 340, November 1952).

**G. M. Walton, "The Lost Librarian," New York Public Library. Bulletis, 29:530 (1925).

**The epigram was first applied to Isase Casaubon, the learned librarian of King Henry the Fourth of France, by his biographer, the Rev. Mark Pattison, of Lincoln College, Oxford. Casaubon was accused of having neglected his library duties in the pursuit of studies that were not related to his professional library work.

**Wilberforce Eames, "What Should Librarians Read?" Library Journal, 25:60 (Feb. 1900).

ACRL Microcard Series

The ACRL Publications Committee announces the inauguration of an ACRL Microcard Series. It will consist of longer studies in all fields of library science (not necessarily college and university librarianship) which are not suitable for publication in any of the existing media. They will be subjected to the same editorial scrutiny that is in effect for College & Research Libraries and the ACRL Monographs. Manuscripts should be submitted to Lawrence S. Thompson, chairman, ACRL Publications Committee, University of Kentucky Libraries, Lexington, Kentucky.

Current Serial Records— An Experiment

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IN SEPTEMBER 1951 an experiment in housing of current serial records was undertaken in the Department of Agriculture Library. Until this time, all of the records were housed in visible files set up on swivels, two files to a swivel, making a total of twenty files on ten swivels, and using forty-three linear feet of floor space. The desks on which the files were placed were in an unbroken row, allowing no aisle space between checkers. For some time, the staff had been concerned with whether the visible files were the most efficient type of files for the work. The problems, other than floor space, which brought up the questions were: accessibility to the files by assistants other than the periodical checkers, constant interruption to the checkers by these assistants, efficiency of the files from the checkers' viewpoint, and overcrowding of the visible file units.

At the Department Library, the Current Serial Record consists of all serial titles for which a piece published 1949 or later has been received. The term serial is interpreted broadly to include any title issued in parts which is incomplete in the library collection, thus periodicals, annuals, biennials, and even incomplete works-in-parts are considered serials. The checking cards are standard catalog card size, and are arranged alphabetically by latest form of catalog entry. Each card shows call number, author, title, publisher and address, fre-

quency of publication, whether the title is purchased, and binding decision if more than one copy is to be bound. For publications issued semi-monthly or less frequently, one card is used to record holdings for three years; for publications issued more often, a card is used for each year. The record is kept on a three to six year basis and at the end of every third year, the checking record for the earliest three years is transferred to the permanent holdings records. At the time of transfer, all closed or suspended titles, and those titles for which no piece published in the last three years has been recorded, are removed from the current record. At the present time, there are over 22,700 titles in the current file and it is estimated that this number will increase to approximately 25,000 titles before another transfer of records takes place.

The periodical checkers handle over onehalf million pieces a year, adding to the collection those pieces that are needed, and disposing of duplicate pieces. In addition to their checking duties, they are responsible for claiming all missing issues, notifying the Acquisition Section when a missing issue is out of print or a third claim for missing issues goes unanswered, notifying the Bindery when all issues of a volume have been received so that the issues can be picked up from the shelves for binding, sending unrequested non-cataloged titles to the Acquisition Section for possible selection for the collection, and sending pre-selected new titles and changes of issuing offices and titles to the catalogers. The mail sorting is handled by one assistant, and the work

outlined above by six assistants and halftime of one reviser.

The current files are in constant use not only by the periodical checkers, but also by the permanent serial records assistants who answer all requests for information on holdings, by Acquisition Section assistants for searching purposes, and by Division of Bibliography assistants for information of value in the preparation of new bibliographies. The permanent serial records assistants alone account for about 2000 uses a month. With the visible files, every time someone other than the checker consults the file, the complete file is turned away from the checker to face the user.

Prior to the beginning of the experiment, investigations into all types of new equipment, both library and business, were carried on. These revealed nothing that would supply the answer to all of the problems. In thinking back over older types of equipment, it seemed that the catalog tray to hold standard 3 × 5 cards furnished the best possibilities and the experiment was begun with one of these trays. The result of one day's checking, using the cards set up in the 3 × 5 tray for half the day and the visible files for the other half, were so promising that all of one checker's entries were removed from the visible files and put into 3 × 5 trays. Careful production records were kept and improvement in efficiency was so marked that a special case and trays were designed and built to carry on the experiment.

In planning the new cabinet and trays, certain objectives were kept in mind. The trays had to be easily available to users of the records other than the checker, with minimum disturbance to the checker. They had to be within normal arm's reach, and light in weight to lessen fatigue. The shelves had to be so spaced that the checker could replace easily those trays which had been withdrawn and so that there would

be no binding of guide cards. The experimental cabinet was built to measure 201 inches high, and is open both front and back so that trays can be withdrawn from either side. The shelves are spaced 31 inches apart, the lowest shelf is two inches above the desk, and there are no vertical separations on the shelves. The trays have an inside capacity of 16 inches and are 5 inches wide and 34 inches deep, with label holders and pulls on the back and front of each tray. There are five trays on a shelf, and four shelves in the cabinet. The front, back and sides of each tray are made of light weight wood and the bottom is composition board.

The checking records were transferred from the standard catalog trays to the new trays after each set of cards for a title was hinged with plastic. It was found that 15 trays, leaving adequate space for expansion in each tray, replaced 108 visible file trays, or that one of the new trays, allowing space for future growth, replaces 7.2 visible file trays. It was decided to use a plastic to hinge each set of cards because paper clips catch on other cards, staples prevent cards from being opened flat for certain routines, and tapes would present problems in transferring cards to the permanent serial record. Third cut guide cards were inserted at frequent intervals to make for fast location of a specific title. The cards face the checker and the tray labels on that side are white, those on the back are orange.

The results of the first checker's work were reported in detail before the Serials Round Table of the American Library Association on June 30, 1952, and at that time, it was stressed that further experimentation must go on before any final conclusions could be reached. Since that time, two other checkers have been assigned to the experimental file. One of these was a

¹ Shachtman, Bella E. "Simplification of Serial Records Work." Serial Slants, 3:6-13, July 1952.

fairly new checker, and the other was the most experienced checker in the section. Production records were available for each of the assistants for the time they had worked with visible files and similar statistics were kept while they worked with the experimental file. When each checker returned to work with the visible files, her production records on those files were kept for comparative purposes. Below are shown the comparative average production figures for each checker for a period of several months work with each kind of file. The third assistant to work with the 3 × 5 files has not yet begun working again with visible files and therefore no figures are available for her in the third category.

Visible file 3×5 file Visible file 1st checker 85% 109% 103% 2nd checker 95% 98% 99% 3rd checker 110% 118%

The evidence shows that although there is a gain in production in each case when the 3 × 5 files were used, over the production in using the visible files, a comparable drop is not shown upon returning to use of the visible files, and in fact, production may continue to show an upward trend. The old management principle seems to be proven anew-motivation and training play the most important part in producing high worker efficiency regardless of the equipment used. The motivation in this experiment came from the enthusiasm of each checker in participating in the experiment and her interest in the results. Further motivation came from each checker's desire to stop working with visible files from which she has to pull out and return so many trays in comparison to the number worked with in the experimental file. Training is a continuous operation in the section and went on in all cases before, during and after each assistant's period of work with the new file.

Although the production of the checkers will not increase as much as was indicated by the figures of the first checker, the Department Library plans to discontinue the use of visible files for the Current Serial Record. Space is one important factor. Twenty visible files comprising ten units will be replaced by six 3 × 5 units; eight desks by six. Aside from gaining space, more important advantages expected are:

- Handling of fewer trays by the checker, thereby lessening fatigue.
- Accessibility of most of the file to the checker while part of the file is being used by another assistant.
- Easy insertion of new titles with no need for shifting.
- Use of guide cards at 1-1 inch intervals will avoid the necessity of preparing an insert for each title.
- Informational letters may be interfiled with the cards temporarily.
- Better morale by improvement in the appearance of the section.

The experimental file has shown that the new cabinets will not have to be as large as the original model. It is planned to have five additional cases built, each to be 16 inches in height and to contain 15 trays on three shelves, making the trays even more easily available to the checker than they are at present. Except for height, the new cabinets will be the same as the experimental cabinet. The trays will also be the same but will be cut in length to an inside capacity of 14 inches.

A relatively inexperienced assistant carried on the first part of the experiment and showed a substantial increase in production when using the 3 × 5 file. This rate of increase did not hold true for the most experienced checker who was apparently handling about as many pieces as one person can handle, regardless of the type of equipment used. It is noteworthy that without regard to the length of experience each

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Departmental Libraries in Divisional Plan University Libraries

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THE ORGANIZATION of university libraries according to a broad subject plan is a relatively new development. The first divisional plans were put into effect over ten years ago at the University of Colorado and at Brown University. The University of Nebraska followed suit soon thereafter. A shift to a divisional arrangement is in process or is being considered at other major universities, although the application of the principles of divisional organization will probably vary at all of the institutions. The principal tenets of the divisional plan might be listed as follows:

- All functions of the library, with the exception of technical processes and top administrative positions, are divided into subject areas. These broad areas are usually three, i.e.: the social sciences, the humanities, and science and technology. The divisional librarian usually reports to the director of libraries or his assistant and through delegation of authority is responsible for administration, public service, student and faculty contact, book selection and branch or departmental libraries in his subject area.
- Free and open access to all materials is implicit in the divisional plan. In the central library there is usually a divisional reading room for each subject area con-

sisting of an open shelf collection carefully selected to represent the best material in the fields covered. There may also be a core stack containing little used

 Public service librarians, or those serving in the divisional reading rooms, are subject specialists rather than reference or circulation librarians.

4. Pedagogically the divisional library is designed to forward the trend away from the "splintered curriculum" and to support the theory of a "general education" which advocates survey courses designed to present the student with the full sweep and implication of broad subject areas. The movement away from the lecture and text-book form of teaching toward a fuller use of a more independent type of study and research has also had much influence on this type of library organization.

Although divisional plan libraries built on a subject approach are relatively new in university library circles a comparable type of organization has been working well for many years at several large American public libraries. The movement was started at the Cleveland Public Library some fifty years ago and was a reaction against the old closed stack idea. It is interesting to note that the open shelf subject plan is in effect a reversion to the primitive library where all materials were kept in reading rooms on open shelves running around the walls.

Since university divisional plan libraries are relatively new they still have unsolved problems—one of the most important being the status of the departmental library.

¹ For an excellent and recent statement on this type of library service see Frank Lundy's, "The Readers' Services, Introduction to a Midtwentieth Century Concept of the University Library' which is chapter 6 of Louis R. Wilson's and Lundy's Report of a Survey of the Library of the University of Notre Dame . . . Chicago, American Library Association, 1952.

From the administrative standpoint departmental collections present no problem since they may very easily be placed under the aegis of the proper divisional librarian. From another viewpoint, however, the departmental library violates the most important canon of the divisional plan—the presentation on open shelves of all important materials in broad subject areas. Such a presentation is difficult if not impossible if the major part of a subject collection is scattered over the campus and grouped together in various narrow categories of knowledge which ignore the ever growing interdependence in all fields of learning.

Departmental Libraries in the Humanities and Social Studies

Departmental libraries in the areas of the humanities and the social studies have caused little difficulty. Colorado, Nebraska and Brown have all been successful in bringing together most of their collections in these fields and presenting them in divisional arrangements in the main library buildings. The only exception at Nebraska has been the Law Library which has remained in the College of Law building because of its intensive use by a special clientele. It has also been considered necessary at Nebraska to have small laboratory collections in music and architecture which are operated by departmental secretaries and administered by the divisional librarian in the humanities. In general, however, departmental libraries in the humanities and social studies are non-existent or unimportant. This is so because with these disciplines the library is the laboratory. The humanities and social studies faculties, in general, have been very pleased with the divisional arrangement and apparently have no desire to go back to the departmental system. The students, to say the least, have been enthusiastic about the open shelves and the help from subject specialists. Significant increases in circulation figures at Nebraska, Colorado and Brown attest to the popularity of the new arrangement.

Departmental Libraries in Science and Technology—The Real Problem

Departmental libraries in science have presented the most difficult problems since the scientist has the most valid argument for such collections, i.e., the book for much of his research is a laboratory tool and must be used in the laboratory, not the library. This difficulty seems to have been at least partially solved at Colorado and Brown. The following information from the directors of libraries at these institutions explains their handling of the situation.

". . . We have for all practical purposes centralization of science and technology library facilities at the University of Colorado. The materials remaining in the Geology Library are of practically no interest to engineering, chemistry, physics, biology, anthropology, or any other departments. As to the reaction to the centralization, my impression from discussion with various faculty members is that the advantages of centralization of materials, professional supervision, and longer hours of opening for the divisional libraries are generally recognized as outweighing any disadvantages.

"The Engineering School established reading room facilities in the engineering building a couple of years ago with the idea that students would prefer to remain in the building between classes. Copies of personal subscriptions to journals and personal copies of engineering books were placed in the room and study tables and reading space were provided. So little use was made of the room it was discontinued after a brief period. The engineering students apparently prefer to come to the main library and particularly to the Science and Technology Reading Room.

"I am quite sure that there has been a tremendous increase in the student and faculty use since the centralization of library facilities. This is an opinion which lacks actual statistics for use in science and technology materials before centralization. The departmental libraries generally were open for limited periods and enrolment before the war and before centralization was a fraction of what it is now. The following circulation statistics for the year July 1, 1949 through June 30, 1950 indicate the use made of library materials in the Science and Technology Reading Room:

One day or overnight charges Two-week charges	10,752
Faculty charges	2475
Total items charged from room	31,046

We also keep account of the number of items shelved from tables in the reading room. The total for this one-year period was 147,064, which indicates the amount of use of materials from the open-shelves as compared to materials charged from the room. A count is made by the attendant at the desk of the number of people entering the room and this total for the year was 188,267, the highest total for any of the divisional rooms. The circulation from Science and Technology is the lowest of the four divisional rooms but the number of items used in the room is the second highest.

"Current issues of specialized journals in physics, biology, and mathematics are sent to the departmental offices. The back files of these journals are in the central library and all general scientific periodicals are in the central library.

"The advantages of centralized science and technology library services have been indicated in a preceding paragraph. The only real disadvantage I can see is that occasionally it may be inconvenient for a faculty member to have to come to a central library. However, I feel that a sensible policy in regard to office or laboratory collections will provide materials which are frequently or constantly in use and I think it is an advantage for the faculty member to come to a central collection where he at least takes a chance on being exposed to considerably more material in his own or in related fields than ordinarily would be available in a departmental library.²

"In the fall of 1938, Brown consolidated its departmental libraries of biology, psychology and botany to form the Biological Sciences Library. This library is housed in the biological laboratory. The departmental libraries of mathematics, physics, chemistry, geology, and engineering were consolidated and together with the astronomy collections and

general science and academy publications from the main library form the Physical Sciences Library. This library is housed on the top floor of our chemical research laboratory. Both divisions are administered from the main library. Most orders for new books in these subject fields are placed by the assistants in charge. New periodical subscriptions are generally placed on recommendation of the academic departments.

"At the time the libraries were consolidated there was some opposition by two departments, however, it was not long before most faculty members considered that the longer hours of opening, improved service to students and faculty more than compensated for not having the libraries nearer to their offices and laboratories. The use of the collections by both faculty and students has increased considerably since the libraries were moved.

"We have small laboratory collections of approximately 500 volumes for the Botany Department and at the Observatory. Both of these collections are charged out from the divisional library, all volumes are subject to recall to the division when needed for use there. These collections are for reference in the department and circulation of the volumes is through the divisional library.

"The chief advantages that the divisional libraries have over departmental libraries as far as our library is concerned, are that we are now able to provide a trained staff, maintain uniform hours for all of our collections. We are able to keep a better check on book ordering and have it done at the proper time. The reference service provided has also improved greatly both in quality and quantity. Further we have been able to eliminate duplicate subscriptions to periodicals and to a smaller extent duplication of books. Formerly, we might have to buy as many as three or four copies of an important monograph while now one or at the most two copies generally satisfy our needs. The book funds saved have been used to strengthen files of periodicals and society publications. It is easier to maintain the two card catalogs than it was to keep up the eight or nine we had to provide under the departmental plan. There are advantages to the faculty and students in that they do not have to go from library to library in order to find all of the material they are interested in. This has been one point that has impressed new faculty members and visiting scholars.

² Wilson, Eugene H. Letter to J. R. Blanchard of May 22, 1951 (MS)

"I suppose the greatest disadvantage is to the faculty member, who could spend time browsing through the new periodicals more regularly when the library was handier to the departmental offices."

It should be noted that Brown has solved its problems through the consolidation of departmental libraries into two divisions housed outside of the central building rather than bringing all collections in science into the main library under one division of science and technology.

There has been less centralization of departmental collections in science and technology at Nebraska than at Brown or Colorado. When the new library building at Nebraska was being planned (shortly before World War II) the faculty agreed that all departmental and some branch libraries, the majority of which were scientific, should be centralized into the new library. Since the completion of the building the Engineering College Library, the Pharmacy Library, the Mathematics and Physics Library, and the Dentistry Library have been moved in. These libraries were centralized with the support and help of the faculty. Laboratory library collections have been established in the College of Pharmacy, the College of Dentistry, and in the Physics Department. The branches that remain outside of Love Library are the Chemistry Library, the Biological Science Library (botany, zoology, bacteriology), and the Geology Library. It is very doubtful that the biological sciences and the chemistry libraries will be centralized in the near future. These departments are strong at Nebraska and their faculties are determined to have their collections close at hand. There are, of course, the other two large scientific libraries on separate campuses, the College of Agriculture Library and the College of Medicine Library, both of which fall under the aegis of the Divisional Librarian in Science and Technology.

In spite of the lack of centralization it is felt that the Division of Science and Technology at Nebraska is successful for the following reasons:

 The administration of the branch libraries in science and the collections in science in the main library are coordinated by the divisional librarian. This prevents extensive duplication of materials, permits interchange of personnel, and promotes better administrative practices. Having an administrator trained in science library work in charge of a university-wide science library service has many advantages.

 General science publications, of which there are many, can be housed in the main building. Only the richest university can endlessly duplicate copies of such periodicals as Nature, which covers all

fields of science.

3. General reference and bibliographical services in science can be concentrated rather than be disbursed and duplicated throughout many branches. The more or less sharp lines of demarcation which formerly existed in the various fields of science are rapidly breaking down. A natural scientist, for instance, often needs to know and use certain literature in the physical sciences. The physicist must often go to the natural sciences for information. The relatively new branch of learning called biophysics is an example of this mingling of the natural and physical sciences. Another hybrid is biochemistry which has assumed great importance in recent years. This overlapping will undoubtedly continue to grow making it increasingly difficult to do teaching and research in one science without making extensive inroads into other fields of learning. Even the social sciences, which some natural scientists used to say were not really sciences at all, have encroached onto the hitherto sacrosanct domain of "real" science. Psychiatry is a famous example. Philippe Le Corbeiller (a mathematician and philosopher, formerly with the French Ministry of Communications and now a teacher of

⁸ Jonah, David A. Letter to J. R. Blanchard of June 13, 1951 (MS)

communications at Harvard) in a brilliant article, "Stars, Proteins, and Nations," published in the Atlantic, points out this inter-relationship of the natural and the physical sciences with the social sciences. "There is a definite order." he says, "in which sciences have developed in the past and are likely to develop in the future." This idea of the development of the fundamental sciences, each dependent on each and all evolving in a pattern running from the simple to the complex, was originated by Comte and Herbert Spencer. "Spencer's list runs thus: Mathematics, Physics, Chemistry, Biology, Psychology, and Sociology. The thesis is that psychology and sociology, the sciences which are of the most immediate and real importance to man. are the most complex. They are still in a primitive stage of development, whereas mathematics and physics, for instance, have progressed much further. "All sciences," LeCorbeiller says, "will in a distant future eventually merge into one, a sort of sociology which will have absorbed all the natural sciences." means then that a teacher and research man must go further and further afield and must use an ever wider assortment of periodicals, books, bulletins, periodical indexes and abstract journals if he is to do up-to-date and original work in his specialty. As applied to library science the implication is that the small branch collection specializing in a particular science will either need to grow to an unwieldy and expensive size with much duplication of material in the central libraries and other branches or remain small and unsatisfactory.

4. Selection of materials is improved. Under a departmental library system publications of a general nature and those which happen not to be of particular interest to the faculty at the moment will be overlooked. In the divisional set-up at Nebraska, at least, the Divisional Librarian and his assistants see that these

gaps do not occur.

There appears to be no easy way to satisfy all concerned in the handling of sci*LeCorbeiller, Philippe. "Stars, Proteins and Nations," Atlantic Monthly, 178:28-83, December, 1946.

ence and technology collections in the divisional library. From the evidence gathered at Nebraska, Colorado and Brown, however, it seems probable that one of the following solutions will work in the majority of situations.

1. Centralize the bulk of the collections into the main library building, being particularly insistent that publications of a general nature which overlap into several fields of science be included. With possibly a few exceptions, indexes, abstract journals and other reference tools should also be kept in the main library and be serviced by subject specialists in the Division of Science and Technology. To satisfy the need of the laboratory worker in the descriptive sciences it is recommended that laboratory libraries be set up wherever necessary. These collections should be kept small and should be administered from the main library. It is felt that the abstract and applied sciences (mathematics, physics, engineering, agronomy, etc.) can be adequately served from the central collection since workers in these areas seldom use the book in the laboratory. The worker in the descriptive sciences (botany, zoology, geology, etc.), however, must often bring the book to the laboratory to compare the specimen with the printed description. Both Colorado and Nebraska are now using systems of laboratory libraries to a limited degree.

 Consolidate the science collections into two main groups—the biological sciences and the physical sciences—and house them in areas convenient to the faculties concerned. Such an arrangement has been worked out with apparent success at

Brown.

Conclusions

The pattern of development at university divisional plan libraries is still in the process of formulation. It is obvious, however, that departmental libraries are becoming obsolete in systems where the divisional plan is used. In the humanities and the social studies the departmental collection has al-

most disappeared and is no longer a serious problem. Difficulties still exist in science and technology but are gradually being overcome through centralization of general science materials, provision of a centralized service by librarians trained in science, provision of laboratory or office libraries where necessary and/or the consolidation of science collections into two large groupings contiguous to the departments served.

Future developments in science and in library techniques indicate that even more centralization will take place and that the rapid transmission of printed material through new electronic devices will eliminate the necessity for outlying groups of library materials. The use of microcards. microprint and microfilm will make the central collections more compact. overlapping of all branches of knowledge. the unitary principle of science, will eventually make large separate collections on the periphery of the campus both inefficient and antiquated.

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Current Serial Records

(Continued from page 242)

checker had prior to the experiment, each one showed an increase in production when she changed to the 3×5 file, and in not a single case was there a decrease. Since the 3 × 5 files are considerably cheaper and require less space than the visible files, it seems that the burden of proof of efficiency should be placed on the more expensive method rather than on the more economical method. This is equally true of tub files, rotary files and other types of serial

record files. According to this experiment, the 3 × 5 file is at least as efficient, when properly applied, as any other type of file, offers a number of advantages over other types of files, and costs a great deal less in money, space, and human effort. Until there is clear evidence that other types of files can supply advantages which would justify their additional cost and space, the USDA Library will use old-fashioned 3 × 5 card files for its Current Serial Records.

Special Services in Liberal Arts College Libraries

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THANKS to a growing awareness on the part of library administrators and the publicity given such activities by awards like the John Cotton Dana Publicity Award and the Library Public Relations Council Award, special services are beginning to come into their own. Many college and university libraries have tried to provide these strategic services, but they have too frequently assigned them to traditional departments. There they have been relegated to a secondary place.

Special services are not as firmly entrenched as are other types of library activity, but they are no less important. A collection may be assembled with great care and foresight but it is serving no useful purpose if its resources are incompletely tapped, either because of a lack of publicity on the part of the library, or a lack of working knowledge on the part of the prospective borrower. This was the conviction that prompted H. G. Bousfield, chief librarian at Brooklyn College to establish in 1948 the Special Services Division as a separate library unit.

The primary purpose of the division is to act as liaison between the library and the public it serves. It operates in the following areas: public relations and publicity, exhibits, library publications and orientation (tours and lectures). Since there are many libraries which do not engage in these activities at all, perhaps a brief explanation and some indication of their scope at Brooklyn College will be helpful.

Public Relations and Publicity

Publicity releases, leaflets, signs and posters keep students and faculty informed of the library's activities, of new services, and of changes in its policies and hours. At Brooklyn College, library news is submitted for each issue of all the campus publications—the day and evening session student papers, the sober faculty bulletin, and the less formal faculty newsletter. These releases, which herald the library's hopes and plans, as well as accomplishments, have paid dividends in campus interest and in the sympathetic treatment the library receives in print. Student journalists are encouraged to come for interviews and are provided with material for feature articles.

The department participates actively in planning for the reception of visitors, whether they are foreign librarians, library school students, or children from neighboring schools who have come to see the exhibits. Professional visitors are provided with copies of the library's publications in which they have a particular interest.

A special effort is made to engage the library in cooperative enterprises with other academic departments on the campus. Such activities as, for example, a vocational panel in librarianship, with the Department of Personnel Service, and the library lecture program with the English Department.

¹The Library of Brooklyn College is an academic department. The individual units in it are therefore called "divisions" to prevent confusion. [Editor's Note: Brooklyn College Library was the recipient of two awards in June, 1952; the annual award of the Library Public Relations Council and an Honorable Mention in the John Cotton Dana Publicity Contest.]

Desirable library-faculty relations are also fostered through library-sponsored symposia, which bring off-campus experts to the college. One such occasion was a program on the selection and use of audiovisual materials, which was launched by the library to meet an urgent need for information in this important field.

Copy on all items likely to be of interest to the library world is sent to the professional periodicals. This may range from short items about personnel, symposia, publications, and new, time-saving devices, to complete articles. A publicity scrapbook is maintained, which contains programs, articles, publications, pictures and clippings.

Exhibits2

The Chief Special Services librarian organizes, schedules, and supervises all exhibits displayed in the library entrance hall, whether library-assembled or arranged by student groups and college departments. The response to the invitation to use these facilities is generally such that space usually has to be arranged for several months in advance of exhibit time.

Even special and fixed occasions are provided for (i.e. the Romance Language Department usually wants the two weeks including Pan American Day; the Shakespeare Club, the two weeks including the dramatist's birthday, etc.). The library assembles exhibits whenever there is unassigned time (usually this means the summer months), when an occasion is not included within any one department or club's province (i.e. Honors Day) or when a scheduled group discovers at the eleventh hour that it is not quite ready to exhibit.

There are very few such defaults, thanks to a combined code-and-application form evolved by the Chief Special Services librarian, one copy of which remains on file, while the carbon is turned over to the student exhibit chairman to remind him of the date and of the restrictions connected with the privilege of using the cases.

A news release on each exhibit is sent to all four of the college's publications. If it appears in print, a copy of the issue containing the account is sent to each exhibit chairman, earning good will for the library. Wherever the exhibit warrants it, pictures are taken and submitted, with appropriate text, to interested library journals.

Library Publications

The Special Services Division edits, designs the format of, and arranges for the distribution of two handbooks-one designed for the students and the other for the faculty. The student publication is distributed to each freshman as part of the library lecture. Whenever a revision of the faculty handbook appears, copies are sent through the college mail to each member of the staff. Thereafter it is distributed only to newcomers. The chief of the division also edits the Staff Bibliography, an annual compilation of books, articles, abstracts, reviews, etc. published by the college staff during the last calendar year. In addition to these recurrent items, the department also explores the need for additional publications to serve a special purpose. It published, for example, Facts About Brooklyn College Library, a pamphlet designed to be sent to other libraries and agencies when they wrote asking about our plant, organization, source of funds, book stock, special collections, etc. It thus obviated the need for an individual reply to each questioner. Another such item was the Open Letter, which was created to show the students that the library was aware of their difficulty in obtaining some types of material, and to indicate to them how we planned to solve these problems, or why we could not.

² Cf. Sellers, Rose Z., "Exhibits Can Be Easy," Wilson Library Bulletin, 23:526-7, March, 1949.

Library Instruction3

The student's first introduction to this library takes the form of a half-hour orientation tour, with the scheduling and briefing of the tour guides done by the Special Services Division. The tour generally takes place during registration week.

Beginning with the fourth week of the semester, after the term reports have been assigned, and help is welcome, the division arranges for each student in English I to receive a lecture on the use of bibliographical tools, with special emphasis on the techniques of research in the preparation of term papers. The lectures are given by librarians. The subjects covered are: the catalog (types of author entry, title card as main entry, title card as secondary entry, periodical card, subject card); bibliographies and indexes (for whole books, parts of books, periodicals, government documents); steps in looking up material on a subject; how to assemble a bibliography; special reference services. The lecture is illustrated with the library's own slides. Each student receives a copy of the student library handbook, (which can be used for review), and is required to fill out a problem sheet on the material covered in the lecture. The problem sheet serves not only as a follow-up, but also to indicate to the lecturer whether there are still any special areas of difficulty.

The scheme of assigning the foregoing as primary functions to a separate division, with its attendant saving of time through the dovetailing of duties, having worked out so well here, it occurred to the Chief Special Services librarian that it would be of interest and value to the profession, if a study were made of how these activities are controlled in other college libraries. A questionnaire was therefore submitted to the

chief librarian in 200 selected liberal arts colleges. Of those, 155 responses or 77.5 per cent were received.

Exhibits

To the question, "Does your library hold exhibits?" 129 answered YES, 22 answered NO. The 129 answered as follows to the question, "Are they the responsibility of the professional staff?": YES—117, NO—2, PARTIALLY—10. (In the case of the last-mentioned, responsibility is shared either between professional and non-professional members of the staff, or between the professional staff and other departments).

Among the 117 who responded YES, in no case is responsibility for exhibits the full time job of any one librarian. The supervisor of exhibits also discharges one of the following functions:

reference librarian	32
circulation librarian	16
chief librarian or director of libraries	15
special collections or rare book librarian	7
catalog librarianassociate librarian or adminstrative	4
assistant	3
librarian, library science instructor, arts division librarian, subcommittee of fac-	
ulty library committee, etc.)	10

In 9 libraries, a staff committee assumes the function and in 21 libraries, the responsibility is rotated at given periods among the members of the staff. Of the 2 libraries which indicated that non-librarians assume full responsibility for exhibits, in one case it is assigned to a clerk and in the other, to the Art Department.

"Do you permit the exhibit cases to be used by non-library groups (i.e. student organizations, academic departments, community)?" was answered YES, 99, NO, 30.

Among the 99 who permit non-library personnel to make use of their exhibit facilities, permission is granted as follows:

¹ Cf. Sellers, Rose Z., "Library Instruction at Brook lyn College," Wilson Library Bulletin, 22:618-20, April,

academic	departments	and	students

organizations	43
student organizations only	27
academic departments only	16
any college-connected group (above, plus ad-	
ministration, learned societies, Red Cross,	
etc. Three of this group also gave ex-	
hibit privileges to townspeople)	

The same 99 answered as follows to the question, "Do you have a set of standards or a code that exhibitors must abide by?": YES-41, NO-58.

Among the 41 respondents who answered in the affirmative, only 2 use a code that is in written form. The others rely on a trial lay-out, constant supervision, or a review by the supervisor, to insure good taste, use of library materials, etc.

Library Publications

"Does your library issue any publications (i.e. faculty and student library handbooks, recent accessions lists, bibliographies)?" was answered in the affirmative by 131 libraries; 20 indicated no activity.

With regard to the editorship, 124 libraries, turn this work over to the professional staff exclusively. In 6 libraries the work is done co-operatively by or distributed among librarians and members of other departments, or librarians and clerks. In a seventh the editing is done by the Division of Special Services of the college, not the library. These 7 libraries are therefore omitted from the tally of the next question: "Is editing publications one individual's fulltime job?". To this question only one library answered YES. In the remaining 123, the situation is as follows: in 2 libraries, publications are assigned to committees made up from the professional staff; in 32 libraries, the head librarian or director of libraries adds them to his administrative work; in the remaining 89, the publications are added to the regular duties of librarians in appropriate departments, i.e. the handbook to Reference or to the Reader's Advisor, the accessions list to Circulation (or Catalog) etc.

"What publications does your library issue regularly?" was answered as follows: 103 libraries issue lists of recent accessions; 14 issue a combined recent accessions and library news sheet; 51 publish a student handbook, while 7 provide one for the faculty. Nineteen libraries publish a newsletter designed for staff or faculty or both; 17 issue bibliographies and booklists; 12 issue occasional papers; 4 distribute classified lists of periodicals; one compiles a bibliography of faculty publications and 2 publish a bulletin for their "Friends." (Organizational charts and annual reports were not tallied.)

Library Instruction

Only 3 of the 151 respondents answered NO to the question, "Does your college offer instruction to students on library usage and/or bibliographical techniques?"

On the next question, whether the instruction was formal, the surveyor had frequently to interpret the answer in the light of subsequent information, since many of the respondents answered both YES and NO. Those libraries which offered only a library tour, with the latter merely an introduction to the physical plant, were included with the NOES. So also were those libraries where there was no instruction other than individual guidance from librarians at public desks, scattered lectures given on invitation of instructors, or where the procedure varied too much from time to time to be classified. These criteria brought the total of the NOES to 31.

In the 117 libraries where the instruction was judged to be "formal" 98 responded that instruction is given by librarians exclusively. (Instructors in library science were considered librarians.) In 8 libraries, instruction is given cooperatively by librarians and teachers, and in 11, it is offered by teachers only. Of the 19 libraries where teaching departments are involved in library instruction, in every case where the teaching department was identified (16), it was the English Department.

Among the 98 who responded that library instruction is done entirely by professional librarians, 4 indicated that this function constitutes a full-time job for the person or persons involved. Among the 94 who answered that this is added to other regular duties, the distribution among the library departments is as follows:

entire professional staff			٠,				ú	
reference								
chief librarian or his assistant .			. ,			,		
chief librarian or assistant and	re	fe	r	er	ю	36		
reference and circulation								
reference and acquisition								
reference and catalog								
circulation						×		
catalog								
catalog and chief librarian								
bibliographer								
education librarian								
not indicated					0			

Public Relations

Here again, the responses were not only a definite YES or NO, but a yes-and-no, which the surveyor attempted to interpret. The last group's indecision usually stemmed from the fact that the public relations program was not formalized. Wherever the subsequent explanation of the activities warranted it, the yes-and-no responses were classified as YES. In any case where the respondent checked either YES or yes-and-no but gave no further details, or insufficient details on which to base a judgment, the return was classified as NO.

Also classified with the NO group, were those libraries which indicated that they had no program separate from that of the College Public Relations Office or News Bureau. This held true regardless of whether the respondent had checked YES or NO, for the surveyor was interested in the public relations program only if it was carried out by the members of the library

staff, whether professional or nonprofessional. If the library used the Public Relations Office for press releases only and engaged in other public relations activities on its own, its return was classified as YES. Totals: YES, 61; NO, 90.

The wide interpretation given this item ("all our activities have a public relations angle") was reflected in the answers to the next question, which asked for a listing of the activities engaged in. Many libraries understandably listed exhibits, handbooks and lectures as integral parts of their program, but since these were tallied before, no separate account was kept in this section. A number of respondents, after listing specific activities, used the occasion to emphasize the admitted fact that genuine servicemindedness on the part of the staff was the most immediate avenue for good public relations. One (questionnaire-weary?) respondent listed "filling out questionnaires" as part of his public relations job.

Among the activities most frequently mentioned were:

releases to student news pu	blica	atio	m		an	d	li	n	-
terviews with reporters									
to community newspapers				٠,		. ,		*	×
tours for visitors									
book talks to students, facu	lty o	F C	on	nr	nı	111	ii	y	
participation in radio prog	rams								
host to library organization	18							,	
lectures and teas for "Frier	nds"	gr	ou	p:	¥ .				
suggestion boy									

All of the 61 libraries who were judged to have a public relations program answered YES to the question of whether the program in the library is carried on by librarians. In no case is public relations one librarian's full-time job. That service is distributed among the staffs as a whole or added to duties of individuals as follows:

chief librarian (One wrote plaintively "The	
librarian is a busy guy")	25
whole staff or committee from whole staff	24
associate librarian	5
chief librarian and associate librarian	4
chief librarian and reference assistant	2
reference librarian	1

The Desirability of a Special Services Department

The respondents were asked to indicate whether, if it were possible for them to do so, they would relegate all the special activities (exhibits, publications, library instruction, public relations) to a separate Special Services Department. The answers were YES, 45; NO, 83; Undecided, 11; No answer, 12.

Those who answered NO were asked to give their reasons. It soon became apparent that many had said NO under the mistaken impression that the proposed new department would be composed of non-librarians, whose interest would be synthetic because they are not in close touch with the substance of library procedures. (However, they are included with the other NOES).

The reasons for not wanting a Special Services Department fell mainly into three categories. The largest number (27) felt that their library was too small, or that there was not enough activity of this nature to warrant such a department. The next group (22) indicated that they preferred to have the entire staff participating in all these activities so as to broaden their background and add variety to their assignments. The third group (7) were a special joy to the surveyor (who, together with a parttime assistant constitutes "a Special Services Department"). Their reason was that no one person could possibly have all the qualifications needed for such varied activities. The most appealing NO was provided by one chief librarian who announced "Have too much fun doing it myself." No reason was given by the remaining NOES.

Aladdin's Lamp

"If a Foundation were to provide the funds for equipment, staffing, etc., what

library project or activity would be your first choice?" Thirty-four librarians did not answer this question. In the case of the 117 who did, the answers were as varied as they were interesting. (Many asked for several things so the total will be more than the 117 responding).

The need that appeared most frequently (21 times) was for library instruction: to establish it, expand it, or have the library take it away from the English Department. Tied for second place (with 17 requests) was the desire for an Audio-Visual Bureau or department and for a new library building or extension; 11 respondents asked for more money for staff and books generally, while 10 wanted it specifically so as to bring their cataloging up-to-date or to change from one classification scheme to another; 9 indicated the need of someone to take care of public relations and publicity; 8 wanted to inaugurate or expand a microfilm or microcard project; 6 asked for a music collection with listening facilities. same number wanted a Special Services Department to provide for all the activities mentioned in the questionnaires. There were 5 requests for each of two publications -a student handbook and a library publication (house organ). Studies suggested were the following: the cost of processing library materials, the cost of storing them, the desirability of the open stack system. Three wanted exhibit facilities and personnel. Two wanted a lecture series underwritten. The same number also asked for funds to develop special regional collections. The singles ranged from air conditioning through bibliographic control of current scientific and technical publications.

Perhaps the wistful tone of many of the answers can best be expressed by the two words which appeared below one request: "Any chance?"

French Parliamentary Documents*

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THIS essay deals with the documents issued at the present time by the two chambers of the French Parliament, the Assemblée Nationale and the Conseil de la République. Some notes on the documents of the two consultative organs, the Conseil Economique and the Assemblée de l'Union Française, have also been added. Before describing the documents themselves a brief statement of the functions of these bodies, as provided by the Constitution of 27 October 1946, may be helpful. The adoption of this Constitution did not, however, lead to many changes in the form of publication of parliamentary documents. Many of the series described in this essay have long histories.

The Assemblée Nationale is elected directly and it alone has the power of finally approving proposed legislation. The Conseil de la République renders advisory opinions on bills approved by the Assemblée Nationale. If the Conseil de la République reports that it is in disagreement with the proposals of the Assemblée Nationale, the latter body must again examine the bill. The Assemblée Nationale then decides finally whether or not the bill shall become

law. If an absolute majority of the senateurs in the Conseil de la République approved a bill differing from the one passed in the Assemblée Nationale, a similar majority is necessary at the second reading in the Assemblée Nationale for the bill to pass. The Conseil Economique may examine all bills of an economic and social character (excluding the budget) and others which the Assemblée Nationale may submit to it. The Assemblée de l'Union Française advises on bills and proposals sent to it by the Assemblée Nationale, the French Government or the Governments of the associated states. It can also submit proposals relating to the overseas territories to the French Government.

The most convenient way of describing the French parliamentary documents seems to be the illogical one of analyzing the contents of the Journal officiel de la République Française. The Journal officiel is not itself a parliamentary publication but an administrative one. It does, however, include many parliamentary documents; moreover, of the publications described in this essay, it is probably the one best known in English-speaking countries. It is published daily and one may subscribe separately to certain of its constituent parts.

It has four principal parts, the first of which is entitled Lois et décrets, arrêtés, circulaires, avis, communications, informations et annonces. This part includes all the laws approved by the Assemblée Nationale and also decrees, orders, etc. made by the executive branch of the government. It may be said to include all the legal texts of general interest concerning metropolitan France and some texts concerning the over-

The substance of this paper is based on information given us while we were in Paris during the Sixth General Assembly of the United Nations (Nov. 1951-Feb. 1952) by M. Luca of the Service de Législation Etrangère of the Assemblée Nationale and by M. André Roussy, Librarian of the Conseil de la République. Both these gentlemen were most helpful to us in this and other matters. They are not, however, responsible for any errors that this paper might contain. We have also drawn freely on other writings on the subject. Some of these are mentioned at the end of this article.

seas territories of the French Union. There are, however, some arrêtés and circulaires which are not included. This part of the Journal officiel has monthly and annual subject indexes. A chronological table follows each subject index. This includes references to laws, decrees, etc. "of general interest" only; enactments concerning individuals have to be sought in the subject index. This Lois et décrets part also includes, from time to time, special supplements, such as those listing persons who have obtained military and other medals.

French laws are also collected into a series of volumes entitled Recueil des lois; these are printed on the presses of the Assemblée Nationale. The laws are printed in chronological order, with information about the parliamentary documents issued concerning the enactments when they were in the bill The annexes to some laws are not included in these volumes. They have chronological tables and an annual subject index is included, on colored paper, in the volume containing the laws for the latter part of each year. There is also a subject index in the volume completing the laws approved by the first legislature of the Assemblée Nationale, i.e. covering the period January 1951-June 1951. The décrets and arrêtés are not cumulated into volumes and the Journal officiel remains the best general source for finding their texts, although many of them also appear in the publications of the various ministries and elsewhere,

The second part of the Journal officiel is entitled Débats parlementaires. This contains the official records of the proceedings of the Assemblée Nationale, the Conseil de la République and the Assemblée de l'Union Française. The three sections are in separately paginated fascicules. Debates appear in the Journal officiel on the day following that of the séance concerned and, naturally, this section only appears when the assemblies are in session. The texts of

the debates as recorded in Debats parlementaires are established by the official stenographers and in certain cases they have been submitted to the deputés or sénateurs before printing; they are verbatim texts. Each of the three sections has an annual index of names. There is a combined annual subject index for the Assemblée Nationale and the Conseil de la République, while the Assemblée de l'Union Française has its own subject index.

Prior to their appearance in the Journal officiel the debates in the Assemblée Nationale and the Conseil de la République have been recorded in two series of Comptes rendus analytiques officiels. These records are prepared by special "Services des Comptes Rendus Analytiques Officiels" and they are printed on the presses of the respective assemblies. They are made available to all deputés, sénateurs and accredited journalists at great speed. Sheets are also posted in the lobbies as soon as they are ready. These Comptes rendus are, on the average, about two-thirds of the length of the verbatim report; they are not official Those of the Assemblée Nationale are mimeographed, while those of the Conseil de la République are printed; neither series has an index.

The texts of the debates as published in the Débats parlementaires section of the Journal officiel appear, after a considerable delay, in three series of volumes, one for each assembly, entitled Annales-debats. The pagination remains the same; the Annales-débats are, however, printed on better paper, they have more detailed indexes by speaker and subject (in separate volumes) and they are sewn into paper covers. They are usually large volumes which need to be bound promptly by libraries that intend to keep them permanently. Libraries may feel able to discard the Débats parlementaires section of the Journal officiel when the equivalent section

of Annales-debats is on their shelves.

Written questions and, later, the questions and their answers, if they are obtained, are included in Débats parlementaires. They have separate annual indexes, one for each assembly. In these indexes the questions are grouped according to the government departments responsible for answering them. They subsequently appear in Annales—débats. The Assemblée Nationale has collected the written questions posed during the second half of 1949 into a separate volume of Questions écrites (1951); it is not certain whether the series will be continued.

The third part of the Journal officiel is entitled Documents parlementaires; it contains the texts of bills, reports, etc. introduced in the three assemblies. At the end of the year separate chronological tables for the documents of each assembly are published. Before appearing together in the various fascicules of Documents parlementaires each item is published separately as an Impression. Some Impressions are single sheets of an ephemeral nature, while others, such as certain bills and their annexes and certain reports of commissions, are volumes of considerable importance. The word Impression does not appear on the documents themselves; it is, however, the name generally applied to them. The annexes to the bills setting out the budget proposals are not reprinted in the Documents parlementaires; they do, however, appear as annexes to Impressions.

The Impressions are numbered quartos, the numbers of the Assemblée Nationale commencing at one at the beginning of each legislature, while those of the Conseil de la République begin afresh each year. The numbers are allocated in advance. Some proposals are withdrawn before they have actually been introduced; in such cases the Impression will merely have the allotted number and the name of the sponsor. Such

an Impression is called a carton; cartons never appear in the Documents parlementaires, which explains some gaps in the numbers in that publication. Moreover, the Impressions do not always appear in Documents parlementaires in an exact numerical order.

Some typical headings found on Impressions will now be described. A projet de loi is a bill introduced by the government, while a proposition de loi is a bill introduced by a member of an assembly. Bills are sent for examination to committees (commissions); these committees issue rapports. If more than one committee is involved, the other committees may issue avis. It can be decided that a bill be sent back to a commission for further study or perhaps for the coordination of the original text with the amendments that have been proposed. Such a procedure may give rise to a further series of rapports, avis, etc. Résolutions are decisions on procedural matters, suggestions addressed to the government, or the expression of an assembly's sentiments on important national or international events: they do not have the force of law. Thus some of the Impressions are headed Proposition de résolution.

The Conseil de la République and the Assemblée de l'Union Française publish annual summary indexes of their *Impressions*.

Amendements presented are mimeographed and distributed before the debates; they are not numbered in the Impressions series. Most Impressions are printed on the presses of the assembly concerned. There are, however, some budget documents which are printed elsewhere, as well as some Impressions which appear in mimeographed form.

We have noted that the Débats parlementaires section of the Journal officiel is republished in series entitled Annales débats. In the same way the Documents parlementaires section is republished in three series of Annales—documents, after some delay. Those of the Conseil de la République and the Assemblée de l'Union Française include indexes with names and subjects in the one alphabet. The Assemblée Nationale publishes indexes to both its Annales—débats and its Annales—documents at the end of each legislature, with the title Tables des archives. Legislatures are elected for five years and the Tables des archives for the legislature that completed its term in June 1951 are expected to appear during 1952.

Before returning to the Journal officiel to describe its fourth part, we may note here some separate series of parliamentary documents which may be included under the general term Impressions but which do not appear in the principal numbered series of quarto Impressions just described and which, for the most part, are not reprinted in the Journal officiel. First, there are the feuilletons of the assemblies. These are octavo-size leaflets which are published daily when the assemblies are sitting. They contain the order of the day and a list of the Impressions distributed on that day. The Bulletin des commissions gives in a very abbreviated form a report of the work of the parliamentary committees. Then there are some octavo-size Impressions which give the texts of bills adopted by the Assemblée Nationale and the texts of avis issued by the Conseil de la République.

Returning now to the Journal officiel, its fourth part consists of what may be termed auxiliary documents (documents para-parlementaires). These consist of the Avis et rapports of the Conseil Economique, with their annual index. The most important of these reports and advices are reprinted in pamphlet form in a series entitled Etudes et travaux which is published by Presses Universitaires de France. Etudes et travaux, emanating as they do from a private publisher, are not considered parlia-

mentary publications by French librarians. The Bulletin du Conseil Economique contains the reports of the debates in that body. It is a separate publication, though it is printed by the Imprimerie des Journaux Officiels and looks like a part of the Journal officiel. From time to time the latter publication also includes Annexes administratives; these are mostly reports on a variety of topics emanating from government departments.

The various assemblies also publish works containing their rules of procedure, their lists of members, etc. These additional items will not be described here.

The two current bibliographies of French Government publications that we have, the fortnightly Bibliographie sélective des publications officielles françaises (a joint publication of the Comité de Coordination pour la Documentation des Sciences Sociales and the Commission Interministerielle de Documentation et Diffusion) and Supplément F of Bibliographie de la France both begin with sections devoted to Lois et traités and Assemblées constitutionnelles. Here one finds recorded new volumes in the Annales series, volumes of the Recueil des lois, etc. In addition, especially important texts in the Journal officiel are listed separately in the first of the bibliographies just men-The individual Impressions are only exceptionally recorded in these bibliographies.

There is an excellent account given in the preface to a catalog of French Government documents published in 1940; it describes many practices which survived the constitutional change in 1946 and which are still current today.¹ Present day parlia-

(Continued on page 265)

¹ France. Ministère de l'Instruction Publique. Inventuire général des publications oficielles. Ier serie: Institutions centrales de l'état. T. 1. Publications de ministratives et techniques, 1937-1938. Paris, Librairie Berger-Levrault, 1940, pp. xxxvii-lv. See also Dampierre, J. de. Les publications officielles des pouvoir publics. Paris, A. Picard 1942, pp. 29-32, 109-114, 124-130.

Reference Books of 1952-1953

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Introduction

As IN PREVIOUS ARTICLES in this series this survey is based on notes written by members of the reference staff of the Columbia University Libraries. There has been some experimentation as to the form the listing should take-the first two numbers were survey articles followed by alphabetical lists, the third was an annotated bibliography, the entries being given in much the same form as is used in the Guide to Reference Books. 7th ed.2 Some reference librarians have indicated a preference for this last as they believe it is easier to check and to use with the Guide. Therefore, this is the arrangement used,

Once again, as the purpose of the list is to present a selection of scholarly and foreign works of interest to university libraries, it is not necessarily well-balanced nor comprehensive. Code numbers (such as A16) have been used to refer to titles in the Guide.2

Bibliography

Index bibliographicus: Directory of Current Periodical Abstracts and Bibliographies, Répertoire des revues courants de bibliographies analytiques et signalétiques. Comp. by Theodore Besterman. Paris, UNESCO, 1952v.1-2 (In progress)

1st ed., 1925; 2nd ed., 1931 (A16). This

is the 3rd ed. completely revised, v.1, Science and technology; v.2, Social sci-

1 College and Research Libraries, 13: 30-36, 234-41, Jan., July 1952; 14:72-78, Jan. 1953.

² Winchell, Constance M. Guide to Reference Books. 7th ed. Chicago, ALA, 1951.

ences, education, humanistic studies. List published bibliographies in book form and in periodicals. Arranged by the Universal Decimal Classification.

Malclès, L. N. Les sources du travail bibliographique. Genève. E. Lille, Giard, 1952. v.2 in 2 pts.

This is the second volume of this notable bibliographic manual, the first dealing with general bibliography was published in 1950 and noted previously. (College and Research Libraries 13:30, Jan. 1952). This second volume devoted to the humanities and the social sciences is not limited to bibliographies but includes dictionaries, encyclopedias, atlases, texts, periodicals, and other types of reference and source materials. There are also special sections on the language, literature and history of Slavic and Balkan countries and of the Near, Middle and Far East. A full index by author, subject and title completes the volume.

Volume three is to cover the natural sciences and medicines.

Periodicals

Dahl, Folke. A Bibliography of English Corantos and Periodical Newsbooks, 1620-1642. London, Bibliographical Society, 1952. 283p. il.

This is an expansion of his earlier "Shorttitle catalogue of English corantos and newsbooks, 1640-1642" which appeared in The Library in June 1938. Its aim is to "list and describe all corantos and newsbooks of foreign news in the English language printed during the period 1620-1642".

Detailed bibliographical descriptions are given with reference to sources and locations of copies. The corantos are arranged in chronological order under places of printing; the newsbooks are listed in chronogical order in their series. Introductions to sections and notes give changes of publisher, mode of printing, size, typographical features, identification of printers, variant copies, etc. There is no Türkiye makaleler bibliyografyasi. Bibliographie des articles parus dans les
périodiques turcs. Istanbul, 1952no.1, Mart 1952- (Millî kütüphane
bibliyografya enstitüsü yayimlarindan.
Publications de l'Institut national turc de
bibliographie) Monthly.

Articles in about 275 journals, annuals, and society publications are listed in this new Turkish index, which is arranged by subject with an author index. All titles are given in both Turkish and French, and very brief annotations are added for some entries; book reviews are included. Annual indexes by author and subject are planned. Of particular interest is the intention of the Institute to make available microfilms, translations, or abstracts of all articles included.

Religion

Dekkers, Eligius. Clavis patrum latinorum, qua in novum corpus christianorum edendum optimas quasque scriptorum recensiones a Tertulliano ad Bedam; commodo recludit Eligius Dekkers; opera usus qua praeparavit et iuvit Aemilius Gaar, Vindobonensis. Steenbrugis, In Abbatia Sancti Petri [1951] 461p. (Sacris erudiri; jaarboek voor godsdienstwetenschappen, 3, 1951)

A key to the Latin writings of the church fathers that have appeared in collections and periodicals. There are three indexes: 1, Index nominum et operum; 2, Index systematicus; 3, Initia.

Kasher, Menahem M. Encyclopedia of Biblical Interpretation, a Millennial Anthology. Translated under the editorship of Rabbi Dr. Harry Freedman. N.Y., American Biblical Encyclopedia Soc., 1953- v.1- (In progress)

v.1 covers Genesis, 1:1-6:8.

A monumental collection of Jewish interpretations of the Bible. Includes an anthology of passages drawn from the Talmudic-Midrashic literature pertaining to each verse of the Bible, with indication of sources; a commentary containing exegetical passages from ancient and modern sources, and an appendix containing four essays: Concept of time in Biblical and post-Biblical literature; The atom in Jewish sources; Creation and the theory of evolution; Creation and human brotherhood.

Miller, Madeleine S. and Miller, J. Lane.

Harper's Bible Dictionary. N.Y.,

Harper, 1952. 851p. il. \$7.95;

Thumb indexed \$8.95.

A useful and usable one-volume alphabetically arranged encyclopedic dictionary, though not as comprehensive as Hastings (K89) nor Jacobus (K93). It treats the archaeology, geography and chronology of the Bible, including names of persons and places, ideas, Books of the Bible, phrases, objects, etc. Pronounciation is indicated for some but not all difficult or unusual words or phrases. Illustrated with photographs, line drawings and maps, Bibliographical references are sometimes but not systematically given.

Reallexikon für Antike und Christentum; Sachwörterbuch zur Auseinandersetzung des Christentums mit der antiken Welt. In Verbindung mit Franz Joseph Dölger, Hans Lietzmann, Jan Hendrik Waszink und Leopold Wenger, hrsg. von Theodor Klauser. Stuttgart, Hiersemann, 1950-52. v.1-2 (incompl.) (In Progress).

Bd. 1, Lfg. 1-8, A-Bauen; Bd. 2, Lfg. 9-11, Bauer-Böser Blick.

Long signed articles by many scholars dealing with the relationship of the ancient world and Christianity up to the sixth century A.D.

Social Sciences

Current Sociology. La sociologie contemporaine. [Paris] UNESCO, 1953v.1, no. 1-

This new quarterly journal will present in some issues classified bibliographies of sociological publications and in others articles in the field of sociology. In this first issue the bibliography includes publications, both books and periodical articles, that appeared between January and June 1951. The scope is international and sociology is used in its widest sense. However, an attempt is made to avoid overlapping with other indexes in this field, such as the *Population Index* and *Psychological*

Abstracts. A list of the periodicals used, and author and subject indexes, are included.

Handwörterbuch der Sozialwissenschaften. Stuttgart, G. Fischer [1952-] Fasc.1-

This new edition of the Handwörterbuch der Staatswissenschaften (4th ed. 1923-29) (L229) is now being published in fascicles, which will start at three different points of the alphabet. A. H and Re. The first part to appear covers Handelsrecht to Hume. Articles are signed and include hibliographies which give author, title, place and date of publication. There are some statistical tables and a few footnotes. Inside the front and back covers is the table of contents (in alphabetical order) giving the subject headings which appear in this or in other parts. When the set (6v.) is completed in 1955, an extra volume is planned to contain the overall table of contents, a list of all the writers, and a list of all the references cited.

International Year Book and Statesmen's Who's Who, 1953- London, Burke's Peerage, Ltd., 1953- annual.

A new annual in four main parts: (1) An introductory section covering the reigning royal families of the world and information on various international organizations: (2) the states of the world, giving, for about 95 countries, constitution and government, area and population, financial and banking system, industry and commerce, communications, education, religion, etc.; (1) a diplomatic section listing the names and addresses of ambassadors and ministers of each country; (4) a biographical section giving brief biographical sketches of some 8,000 persons including statesmen and politicians, ambassadors, heads of government departments, military chiefs, great ecclesiastics and eminent lawyers, heads of the greater industries and leading bankers and merchants.

Thèses de sciences sociales: catalogue analytique international de thèses inédites de doctorate, 1940-1950. Theses in the social sciences: an international analytical catalogue of unpublished doctorate theses, 1940-1950. [Paris] UNESCO [c1952] 236p. \$1.25.

Contains listings from 30 member states,

and from Germany, which was not a member at the time of the survey. Titles have been translated when necessary into French or English. Listings are under broad subject, and then alphabetical by the French version of a country's name. There is an index to authors and an index to the broad subjects used.

Business

Benn, A. E. The Management Dictionary; Standardization of Definitions and Concepts of the Terminology in the Field of Personnel Management. N.Y., Exposition Pr., 1952. 375p. \$7.50.

An attempt to provide standard definitions for terms connected with personnel management; 8,624 sources from 1945 to date were searched, and a list was made of those terms on which at least five sources agreed. This list was considered by a group of experts and only those terms on which they agreed were included in the dictionary.

Encyclopedic Dictionary of Business; prepared by the Editorial Staff of Prentice-Hall, Inc. N.Y., Prentice-Hall, 1952. 704p. il.

Covers terms in the many fields of business activity. Designed to provide an understanding of business operations, methods and practices, and a warning of possible legal difficulties concerning terminology.

Education

Sasnett, Martena Tenney. Educational Systems of the World: Interpretations for Use in Evaluation of Foreign Credentials. [Los Angeles] Univ. of Southern Calif. Pr., 1952. 838p.

Bibliography, p.754-838.

Gives detailed information on the educational system of each country, with indications of equivalent evaluation in the U.S.

United Nations Educational, Scientific and Cultural Organization. World Handbook of Educational Organization and Statistics. 1st ed., 1951. Paris, UNESCO, 1952. 469p. \$9. 51s.6d 2.500fr. "The ideal entry for each state comprises a short descriptive passage, bibliography, diagram, classification of school types and set of statistical tables." Pref. Compiled mainly from replies to questionnaires or, where these were not returned, from official printed statistics. Fifty-seven countries are covered. A useful glossary of terms gives English equivalents for foreign types of educational institutions, in five groups (pre-school, primary school, etc.).

Your Opportunity, to Help Others, to Help Yourself, 1952/1953-; an Annual Catalog of Grants, Fellowships, Scholarships, Opportunities, Awards, Prizes, Loan Funds, Competitions, ed. and pub. by Theodora S. Jones. Milton, Mass., 1952- (1952/53, paper \$3.95, cloth \$4.95.)

Arranged alphabetically, with many crossreferences from individual fellowships, prizes, etc. to the field of interest concerned. Gives names and addresses of administrative agencies, funds available, eligibility requirements, closing dates for application, etc.

Linguistics

Romera-Navarro, Miguel. Registro de lexicografía hispánica. Madrid, C.S.I.C., 1951. 1013p. (Revista de filologia española. Anejo 54.)

This is an index to some 80,000 articles or studies on individual Spanish words, listed alphabetically by the words. The references are to periodicals, books, and scholarly collections in various languages, excluding Spanish or Latin-American dictionaries and general etymological glossaries, and complete linguistic studies of individual authors. Latin-American and dialect words are included, and some Portuguese words which are closely related to the Spanish.

Dictionaries

Kurath, Hans, ed. Middle English Dictionary. Sherman M. Kuhn, assoc. ed. Ann Arbor, Mich., Univ. of Mich. Pr., 1952- Pt.E, 1-

This important new dictionary, a research project of the University of Michigan, is based on a vast collection of Middle English quotations, which includes all those assembled for the Oxford English Dictionary, both published and unpublished, in addition to hundreds of thousands gathered for this work. It is to be completed in ten years, in parts of 124 pages each, the whole to consist of about 8,000 pages. The bibliography and a full description of the editing plan are to appear as a separate part in 1953. The first letter to be published is E, of which parts 1-2 (Eescheu) have so far been received; F, D, C, B and A will follow, in that order, and then G-Z in alphabetical sequence.

Science

Gaudenzi, Nerio. Guida bibliografica internazionale per il chimico. Libri e riviste. Firenze, Sansoni, 1952. 509p.

Introduction and classification scheme in Italian, French, English, and German. A classified bibliography of about 3268 books and 1125 periodicals in the field of chemistry, with indexes of periodicals, authors, subjects, and publishers. A second volume is planned to cover metallurgy.

Wilson, Edgar Bright, Jr. An Introduction to Scientific Research. 1st ed. N.Y., McGraw-Hill, 1952. 388p. \$6.

Mainly concerned with statistical methods and laboratory techniques. Brief bibliographical notes at the end of each section, but no general bibliography. A useful guide for graduate students and others beginning research in the sciences.

Technology

Boone, Lalia Phipps. The Petroleum Dictionary. Norman, Univ. of Oklahoma Press., 1952. 338p. \$5.

Bibliography, p.333-8.

Gives definitions and sources of about 6,000 terms used in the oil industry. The dictionary is preceded by a general introduction (p.3-37) to the language of the oilfield.

Home Economics

Simon, André L. Bibliotheca gastronomica, a Catalogue of Books and Documents on Gastronomy, comp. and annotated with an Introduction . . . London, The Wine and Food Society, 1953. 196p. il. 84s.

"The production, taxation, distribution and consumption of food and drink, their use and abuse in all times and among all peoples."

An annotated listing of 1644 items, arranged alphabetically by author, with indexes by shorttitle and by subject.

Simon, André L. A Concise Encyclopaedia of Gastronomy. London, Collins, 1952. 827p. 42s.

Originally published in parts from 1939-1949. The sections cover (1) Sauces; (2) Vegetables; (3) Cereals; (4) Fruit; (5) Fish; (6) Meat; (7) Birds and Eggs; (8) Cheese; (9) Wine.

Includes definitions of terms and ingredients as well as recipes.

Architecture and Decoration

Hamlin, Talbot, ed. Forms and Functions of Twentieth-Century Architecture. N.Y., Columbia University Press, 1952. 4v. il. \$75.

"Prepared under the auspices of the School of Architecture of Columbia University."

v.1, The elements of building; v.2, The principles of composition; v.3-4, Building types.

An extremely important work, which largely supersedes Gaudet's Éléments et théorie de l'architecture (1902). Many specialists collaborated on it, and each building type is dealt with by an outstanding architect. Although there is no general bibliography, each chapter has a list of suggested additional readings; there is a general index, and also one of architectural works described or illustrated.

Gloag, John. A Short Dictionary of Furniture, Containing 1764 Terms Used in Britain and America. London, Allen and Unwin, 1952. 565p. il. \$6.30.

Brief but clear definitions and descriptions, with many line-drawings. Preliminary sections cover (1) description and (2) design of furniture, and the dictionary is followed by lists of British and American furniture makers and designers and British clockmakers; bibli-

ography; tabulated periods, types of furniture, materials and craftsmen from 1100 to 1950. Emphasis mainly British.

Music

American Society of Composers, Authors and Publishers. The ASCAP Biographical Dictionary of Composers, Authors, and Publishers. Ed. by Daniel I. McNamara. 2nd ed. N.Y., Crowell, 1952. 636p. \$5.

First ed., 1948 (Q246)

Includes sketches of 2,171 writers of lyrics and composers, 1400 of whom are writers of popular music, and 402 publishers of music. Arrangement as in 1st ed.

Krohn, Ernst C. comp. The History of Music; an Index to the Literature Available in a Selected Group of Musicological Publications. St. Louis, Mo., Washington Univ., 1952. 463p. (Washington University Library Studies, no. 3)

An index to material on the history of music appearing in some 40 periodicals. Arrangement is by broad period divisions, further subdivided under such headings as General Studies, Composers, and the various musical forms. Indexes by authors and composers. The material was collected in card-in-dex form by the compiler over about twenty-five years, but the periodicals covered are not confined to that period.

Literature

Brewer, Ebenezer Cobham. Brewer's Dictionary of Phrase and Fable. rev. and enl. London, Cassell, [1952]. 977p.

An entirely revised edition of this standard work. For earlier edition and annotation see R38. Articles have been rewritten, many shortened or omitted. New articles have been added including terms used in World War II. Both editions will be needed, as much useful material in the older edition has been dropped from the new.

Granger's Index to Poetry, 4th ed., completely rev. and enl., indexing anthologies published through December 31, 1950. Ed. by Raymond J. Dixon. N.Y., Columbia University Press, 1953. 1832p. \$35.

A completely revised edition of the standard work (for 3rd ed. and supplement see R159). This edition indexes 577 volumes of anthologies; of these 312 also appeared in the 3rd edition, 86 in the Supplement, and 179 are completely new.

Changes made in this edition include (1) the combining of the separate Title Index and First Line Index into one Title and First Line Index; (2) the dropping of prose selections, accounting for the disappearance of "and Recitations" from the titles; and (3) addition of a Subject Index.

The book is divided into three parts; (1) Title and first line index; (2) Author index; (3) Subject index.

A very useful addition to the reference shelf; earlier editions should be kept for the indexing of anthologies omitted from this edition.

Margadant, S. W. F. Twintigduizend citaten aphorismen en spreekwoorden. 's-Gravenhage, Leopolds uitgeversmij, 1952. 741p.

1st ed. 1935.

Includes some 20,000 quotations in Dutch, many of them translations from other languages, for which the original is usually given. Sources include ancient and modern literatures, proverbs, maxims, etc. Arranged by topic with some cross-references. No word index.

Menéndez y Pelayo, Marcelino. Bibliografía Hispano-Latina clásica, edición preparada por Enrique Sanchez Reyes. Santander, Aldus S.A. de Artes Gráficas, 1950-1952. v.1-8. (Édicion Nacional de las obras completas de Menéndez Pelayo dirigida por Angel Gonzalez Palencia. t.44-51.)

v.1-8, A Virgilio.

A bibliography listing Spanish editions of the Latin classics including: manuscripts, editions, commentaries, translations, critical works, imitations, and works showing the influence of Latin classics on Spanish literature. Sections are somewhat unequal in treatment reflecting the special interest of the compiler; some authors, e.g. Horace, Cicero, Virgil are treated at great length. Comments, extracts, etc. are given throughout. Actual bibliographical information is not always complete.

Schneider, Georg. Die Schlüsselliteratur. Stuttgart, Hiersemann, 1951-52. v.1-2 (In progress) DM 32.

Contents: Bd. 1, Das literarische Gesamtbild; Bd. 2, Entschlüsselung deutscher Romane und Dramen.

A key to the identities of real characters and events treated in literature under fictitious names. Not all-inclusive but treats the significant works of many literatures. The first volume gives general explanations and definitions, history and discussion with indexes of authors and prototypes, the second volume is devoted to German fiction and drama and the third will deal with non-German literature.

Geography

Alexander, William McCombie. The Place-Names of Aberdeenshire. Aberdeen. Pr. for the Third Spalding Club, 1952. 419p.

List all place-names in the county of Aberdeen which were in use before 1850, current and obsolete. Local pronunciation is given.

South Africa. Place Names Committee.

Amptelike plekname in die Unie en Suidwes-Afrika. (Goedgekeur tot einde 1948). Official place names in the Union and South West Africa. (Approved to end 1948). Pretoria, Govt. Printer, 1952. 376p. 25s.

A list of approved place-names showing for each correct spelling, indication of province and whether the place has a railway station, motor-bus halt, post-office, etc.

History

Diccionario de historia de España desde sus origenes hasta el fin del reinado de Al-

fonso XIII. Madrid. Revista de occidente, [1952] 2v.

An alphabetical dictionary of persons, events, and subjects in the history of Spain up to the end of the reign of Alfonso XIII in 1931. Articles are generally brief, though some of the more important entries cover several pages; all are signed. Bibliographical sources, not given in the text, appear in an Indice historigráfico (v.2, p. 1493-1519), which is followed by a chronology and a number of sketch-maps. Specialists were in charge of each period or field, and were assisted by a number of collaborating scholars.

Elwell-Sutton, Laurence Paul. A Guide to Iranian Area Study. Wash., Amer. Council of Learned Societies, 1952. 235D. \$4.

Compiled under the auspices of the Committee on Near Eastern Studies of the American Council of Learned Societies.

Includes survey articles on the geography, population and language, social evolution, history, administration, economic structure, religion, intellectual development, literature and arts. These are followed by a Chronology, p. 110-161, and a Bibliography, p.162-235.

Ettinghausen, Richard. A Selected and Annotated Bibliography of Books and Periodicals in Western Languages Dealing with the Near and Middle East: with Special Emphasis on Modern and Medieval Times. Wash., Middle East Inst., 1952. 111p. \$1.50.

Lists 1719 western-language books, and the more important periodicals, with very brief annotations. Includes titles published through Summer 1951. Selection was made by a group of scholars and the list is intended primarily for the use of colleges and libraries.

Rosenthal, Franz. History of Muslim Historiography. Leiden, Brill, 1952. 558p. \$12.

A comprehensive history and discussion of historical writing among the Moslem peoples.

Rössler, Hellmuth and Franz, Günther. Biographisches Wörterbuch zur deutschen Geschichte. München, Oldenbourg, 1952-Lfg. 1-3, Abbe-Hessen. (In progress). DM45 the set.

To be complete in about 45 signatures (8-9 to a Lfg.): parts to appear to 2-monthly intervals. Will include some 2,000 individual biographies, in all fields and from Roman times up to 1933, mainly of Germans but also of some foreigners important in the history

of Germany. Brief bibliographical notes, p. ix-xix, index by period; p. xx-xxxi, index by field or profession (subdivided by period); p. xxxii-xlviii, index by region (subdivided by period).

Westfälische Bibliographie, hrsg. von der Historischen Kommission für Westfalen in Verbindung mit dem Verein für Geschichte und Altertumskunde West-Bearb, von Alois Bömer und Hermann Degering. Münster i. Westf., Verlag Regensberg, 1952- Lfg. 1-4. (Veröffentlichungen der Historischen Kommission des Provinzialinstituts für Westfälische Landes- und Volkskunde. XXIV.) (In progress).

Lfg. 1-4 (Bogen 1-20), p.1-320.

Classed arrangement. An extensive bibliography of Westphalian materials including periodical articles.

French Parliamentary Documents (Continued from page 258)

mentary documents are also described in an excellent though more general, article by M. Roussier entitled "Les publications officielles du Gouvernement français."2 In English much information about parliamentary documents has been included in a

detailed study by Lidderdale.3

122; 174-192.

² Carnegie Endowment for International Peace, European Center. Les publications officielles et la documentation internationale, ed. M. Roussier, Paris, 1952, pp. 31-52.

D. W. S. Lidderdale, The Parliament of France, London, The Hansard Society [1951], especially pp. 116-

Library Service to Undergraduates: A Symposium

The following four statements, with an introduction by Arthur M. McAnally, director of libraries, University of Oklahoma, were presented at the meeting of the University Libraries Section, ACRL, in New York, July 1, 1952. Lack of space prevents the inclusion of several pertinent comments by participants and members of the audience. Essentially, these comments were concerned with the need of faculty members and librarians to work closely together, the distractions which compete with reading and library use, and, in some cases, the actual inability of students to read.

By ARTHUR M. McANALLY

Introductory Remarks

IN ORDER TO PROVIDE background for the problem of library service to undergraduates, it is necessary to go back in history to the time when most university libraries were small and were either informal or else-were organized for service on the alcove principle. Collections were not large, the proportion of graduate students was small and their number negligible by modern standards, and the library served both the graduate and undergraduate more or less equally. The duration of this era varied among institutions.

Beginning in the 1870's, however, when Harvard University introduced the tiered bookstack, the larger university libraries entered upon a long era in which primary emphasis was placed upon the development of great research collections and upon specialized service to the users of these collections. The undergraduate students' library needs tended to be overlooked and his access to the collections gradually reduced, not through deliberate choice but by the trend of events.

By the 1930's, many university librarians began to realize that in the development of their great collections the undergraduate had been neglected, that he was the larger clientele of the two groups of users, and that service to him should be improved. Books were not very accessible to the undergraduate and reserve room service, which was about all most of them got freely, was not very satisfactory educationally. Of course the enterprising undergraduate could surmount the obstacles of huge card catalogs, impersonal circulation desks,

etc., but he was discouraged at every hand.

Some university libraries therefore developed browsing rooms, dormitory collections and the like. These were admirable in their way but no real answer to a real problem.

The search for a method of providing satisfactory library service to undergraduates has led many universities to establish libraries specifically for undergraduates. The same objective also has been a factor in the adoption of the subject-divisional plan of organization in medium-sized and small universities. Separate undergraduate libraries have existed for many years, but have been commonly accepted only since 1945. At least four new ones were established during the school year 1951-52.

The statements below discuss this relatively new development from several different approaches: first, from the viewpoint of the University of Chicago, which has had long experience with such a library unit in different locations on the campus; second, from the point of view of a well-planned undergraduate library in a separate building planned for it (The Lamont Library at Harvard); third, as seen by a librarian whose library is partly subject-divisional and partly open or interspersed (The Fondren Library of Rice Institute); and finally, as viewed by a university librarian fresh from a college library which provided excellent teaching service to students but now in the University of Cincinnati which has not provided so well for undergraduate students.

The College Library at the University of Chicago

Mr. Gwynn is assistant director for readers' services, University of Chicago Library.

THE COLLEGE LIBRARY at the University of Chicago existed for a period of eighteen years—from 1931 to 1949. Although it was always a small operation, I believe that brief account of its history and of the actual use made of it will throw light on what I, at least, conceive to be the real problem of the undergraduate library.

The first college library at the University of Chicago was established in 1931, at the time the Chicago Plan for undergraduate education was introduced. The library had two main purposes. The first was that of making easily available a large number of required books, for many of which every student would be held responsible in the comprehensive examinations. Yet, the college library was not merely a reserve collection, for its second purpose was the provision of a large, carefullyselected collection of optional reading, designed to enrich the curriculum by filling gaps in the indispensable readings, or between courses, and by affording opportunity for the individualization of a highly-prescribed course of study through independent reading.

The collection numbered about 12,000 volumes initially, but grew to about 20,000 volumes in the course of a few years. Extensive duplication was necessary, and the original 12,000 volumes included only 2000 different titles. Of these titles, only one in ten was indispensable or required reading, and this ratio between the required and the recommended readings persisted throughout the first phase of the college library.

Actual use by the college students averaged 70 to 80 volumes per student per year. This was z. relatively high rate, but not much beyond the upper range of student withdrawals in other colleges as reported by Branscomb in Teaching With Books. More important is the kind of materials withdrawn by the students. A special study, made in 1937-38, indicated that, although the 1239 students in one Humanities general course and in two Social Sciences general courses withdrew 29,000 books in one quarter, only

635 of these titles were in the carefully-selected and highly-recommended optional reading category. This is a rate of about one and one-half volumes of non-required reading per year per student. Since we know that typically a few students read a relatively large number of titles, we also know that many of these Chicago students read no optional materials at all. In general, therefore, the students under the Chicago Plan, like college students everywhere, borrowed from their library only the books they were required to read.

In 1942, the college library as described above was abolished, partly because of war-induced pressure for space, but more importantly, because a shift in the college program and teaching methods had greatly diminished demands upon the library.

However, in September, 1943, a new college library, which was also intended to be a source of free reading for the entire university, was created. The core of this library consisted of the 2000 titles of recommended readings in the current college syllabi. To these were added another 2000 titles of material of general current interest, including standard and good recent fiction. The assumption was that a collection of this kind could satisfactorily serve both the college students and the other members of the university. Although the capable librarian worked closely with the college faculty and students, a reading study made throughout the first year showed that college students accounted for only 36% of the use of this library and, moreover, that 71% of the students in the college borrowed not even one book. The carefullyselected recommended readings circulated hardly at all.

As a consequence of her observations over a period of more than a year, the librarian concluded that neither the college faculty nor the library staff really knew what kind of library was needed for the college, and what any college library should properly do in the educational program beyond the provision of required readings. She suggested that a capable research man with faculty rank be appointed full time to study the problem. This

was not done, but for the next few years it was arranged that the college libarian should also be a teaching member of the college faculty and should devote the major portion of his time to thinking through the problem of what kind of library our kind of college should have. Two men held this post in succession. I was the second, serving in the year 1946-47. Both of us failed to accomplish our assignment, largely because each of us served only a year, and because too much of our time was taken up by teaching or by other university library problems. College use of the library continued at an even lower level, and in 1949, when space problems again arose, the dean of the college consented to the disestablishment of the college library, stating that while desirable, it was not necessary to the work of the college at Chicago.

Although I failed to produce an answer to the problem assigned me, I did come to several conclusions regarding the problem of the undergraduate library in general.

It seems to me that the problem of the undergraduate library is not the simple problem of physical arrangement with which we have been occupying ourselves lately. It is quite possibly desirable, in a large university at least, to provide a separate, selected, easily-accessible collection of books that will appeal to the undergraduate and to the general reader in the university regardless of his status. Whether this is a browsing room or a divisional reading room or a Lamont Library is not really important, just so those who really want to read can find good and interesting books when they want them.

Nor is the problem that of conjuring up devices (some of them misguided) designed to lure undergraduates into the library.

The problem is that academic librarians generally have not defined and faced the real problem. They have adopted the goal of more books and more readers without ever questioning the applicability of this goal to the undergraduate library. In doing so, I am sure that they have ruzzled a good many faculty members, who in general display a far more rational view of the library's function than do librarians.

I think there is a problem of the undergraduate library, and I hope that the committee of this section appointed to study that problem will isolate it and will outline steps toward its solution. If they do this, they will probably find themselves considering matters of the following kind:

1. Should we not accept the fact, made clear by numerous reading studies, that only a relatively few undergraduates read beyond the course requirements?

 Should we not consider that perhaps these are the only students who should do such reading?

3. Should we not acknowledge a fact we already know but refuse to accept, that in adult life only a relatively few people read and utilize the knowledge gained from reading, and that these people are the intellectual leaders of our society, wielding an influence greatly disproportionate to their numbers? Should we not ask whether reading or not reading is associated with the basic temperament and personality and mental equipment of the person and is therefore a characteristic incapable of alteration by librarians or anyone else?

4. Finally, should we not put these ideas together and assume—tentatively, until the matter is demonstrated or disproved—that, once good books have been made available, the limited staff and the limited budget of the undergraduate library should be used for one primary purpose: To make certain that we and the faculty together find all the true readers or potential readers in the undergraduate population, and that we see that they get the books they want and whatever special treatment may be desirable—the opportunity to discuss these books, and broaden their reading, and grow intellectually to the limit of their natural endowment?

If this is the thing to do and we do it, we will be doing what the college faculty and the college curriculum already do: provide the same basic intellectual menu for everyone, but make available for those who want them and are capable of utilizing them, those special nutrients above and beyond the standard diet that develop the exceptional student and the exceptional man.

If it turns out that this is what we should do, we will not do it merely by providing a separate undergraduate library, useful though that may be. The questions of what we should do in the areas outlined above, and how we can translate into action what we learn, are difficult ones. Their isolation, their investigation, and their solution, constitute the immediate problem of the undergraduate library.

Lamont Library, Harvard College

Mr. McNiff is librarian, Lamont Library.

THERE IS NO ONE SOLUTION to the problem of undergraduate library service in a university. Institutions differ in their organization, finances, building facilities and curricula. With these, among other factors influencing the type of library service which can be given, each university has to determine its own method of library service to undergraduates. Harvard decided to build a separate library for its undergraduates.

The idea of such a library was not new. The college records of 1765 contain the first reference to the need of separate library facilities for the undergraduates. In the Harvard Library Bulletin a series of articles on the history and development of library services in Harvard College, traces the growth of the collections, the lengthening of hours of service, the extension of borrowing privileges, and the rise of reserved book, classroom and laboratory collections.

With the dedication of the Widener Library in 1915, it was hoped that the library problem at Harvard had been solved for a great many years to come, but this proved not to be the case. The report of the director for 1927-1928 cited the need for more space. The new building had many drawbacks to undergraduate library service. It was too large and impersonal; the college students had direct access only to reserved reading books and a small browsing collection. The large reading room on the second floor proved to be unsatisfactory as a reserved book center and collections serving the survey courses were established in two other buildings. The increased demands of faculty members, graduate students and visiting scholars pushed the undergraduates further and further into the background. The result was that Harvard students were not receiving the quality of library service enjoyed by students in the better four year liberal arts colleges.

By 1937 the space problem was acute and Mr. Metcalf after a careful survey recommended a four point program:

1. The New England Deposit Library for the storage of little used material 2. The Houghton Library for rare books and manuscripts

3. Undergraduate library

4. Underground stacks in the college yard for the expansion of the Widener collection

The idea of an undergraduate library was approved in 1940 by the Library Council and the Administrative Board of the College. The planning of the library was accelerated with the announcement of Mr. Lamont's gift in 1945. Faculty and student committees were formed to consult with the library staff committee on matters of lighting, smoking and furniture.

So much for the background. The building itself has eight levels. The two lowest levels are underground stacks. One level is connected by tunnel to Widener and the other to Houghton. This supplies the expansion noted on point four above. The undergraduate library occupies three main floors and two mezzanines. The remaining level is a roof house which contains six classrooms and a fan room for some of the air conditioning equipment. Stacks are placed in the center area of the building on five levels; on the north side of the building on the main levels are located special rooms and on the south side are the three large reading areas. There are three wide aisles on each main floor leading through the book stack areas to the reading areas. This means that students must pass through the book stack areas to the reading areas. The stack areas on the main levels are divided into 12 alcoves; on the mezzanines there is a regular stack arrangement. Each of the three large reading areas has a row of stalls around the outside walls and a variety of tables and easy chairs. Smoking is allowed in the special rooms on the north side and in the rooms at the west end of the building. Each of the mezzanine smoking rooms has five typing cubicles with sound proofing on the walls and ceilings.

The motivating ideas behind the planning of the library were well expressed by Henry R. Shepley, the architect, when he wrote, "The philosophy on which the functioning of the library was based required first, that it be

conveniently located and inviting of access. It should be one of the main undergraduate traffic routes and there should be no flights of steps to climb to the entrance or monumental vestibules or fovers to traverse before coming to the books. Second, once within the library, the student should find the entire book collec-

tion as accessible as possible.'

Let us see how well the library fulfills this philosophy. The building is situated in the south-east corner of the Harvard Yard and is directly across the street from the Union, the dining hall for freshmen. This means that all the resident freshmen who live in the yard dormitories must pass the front entrance of the library on their way to and from meals. Many of the more heavily used classrooms are located in the vicinity of the library, thus insuring use of the building between classes. There is but one step outside the library, and a ramp is available for students in wheelchairs. Standing outside the glass doors of the main entrance the student sees a functional lobby, reserve desk and book stacks. All books, with the exception of those on a closed reserve section are readily available on open shelves, and may be taken to any area in the building.

The theme of this ALA conference is "Books are Basic." Harvard, believing in this slogan, tries to eliminate all barriers between the student and the book. The establishment of reading habits which will follow the students into their post college years is one of the most important functions of an undergraduate library. Required reading, motivated by tests and reports, presents the library with the problem of adequate supply and efficient distribution. The professional staff concentrates its efforts on the encouragement of general and recreational reading. The accessibility of a carefully selected collection of books is the first requisite. Add to this an efficient ventilating system, good lighting, a building made quiet by the use of sound absorbing ceilings and floors and inviting color treatment of walls and stacks, a variety of reading accommodations and the stage is set for the alchemical reactions described in

Lawrence Powell's talk on "The Alchemy of Books.

Extra-curricular interests in books and reading are encouraged further by such features as book displays, exhibitions arranged by student groups, the record playing facilities of the Poetry Room, the home atmosphere of the Farnsworth Room-a browsing collection, and the Printing Room. In three and one-half years of operation, 25,000 students (exclusive of class groups) have made use of the Poetry Room listening facilities. Surely they have achieved a deeper appreciation of poetry and it may even be hoped that the library has contributed some small part to the development of poets of the future. The small group of undergraduates interested in printing as an avocation are instructed by the Library's Department of Printing and Graphic Arts. The Forum Room, which seats up to 175 people, is available to undergraduate organizations. This room is equipped with a dual turntable and loudspeaker, screen and projection booth and an FM radio has just been installed in order to make available to students some of the programs offered by Boston's new educational FM station. The broadcast of the Boston Symphony Orchestra's Friday afternoon concerts will replace the weekly music record hour offered by the li-

The Lamont Library uses simplified cataloging and a numerical classification scheme which has not more than one decimal place. This scheme is not a classification of knowledge but a means of making it easier for students to find the books for which they are looking. Copies of the scheme with its alphabetical index-a subject guide to the collection -are scattered throughout the building for students to use at the shelves,

The objectives of the library are: (1) to concentrate as far as practicable all undergraduate activities in one place; (2) to make books readily available to students; and (3) to encourage general and recreational reading as well as to supply required reading books. Staff experience and student response seem to indicate that Lamont fulfills these objectives.

Undergraduate Libraries

Dr. Dix, formerly librarian, Rice Institute, is now librarian, Princeton University.

At the risk of seeming conservative and even obstructionist, I should like to propose that under certain conditions a quite old-fashioned method of handling the undergraduate library in the university might be more effective than some of the newer divisional arrangements and segregated collections. Now I am quite aware that the arrangement which I propose would not work in a library system the size of that of Harvard, but after all I regret to say that there is only one Widener Library. In the smaller libraries in the smaller universities I wonder whether any very special treatment of the undergraduate library is really necessary.

This is, I take it, largely an experience meeting. People get tired of hearing "This is the way we do it," but a brief description of the Rice Institute Library will illustrate my point. May I say again that I am sure that our system would not work everywhere else. Rice, like most other universities, is a special place. We have a student body of about 1500, including some 200 graduate students, pursuing a rather limited curriculum with professional schools only in engineering and architecture. The Ph.D. is offered in mathmatics, physics, chemistry, biology, English, and history, and there is somewhat more faculty and graduate research than one would expect in so small an institution. Our library

postwar building.

My point here is that in a library of this size I see no reason for making any special provision for the undergraduate. The total collection is housed in one building, with completely open stacks. It is my feeling that with a little care and planning there is no reason for the undergraduate to become lost in working with a unified collection numbering not more than, say, a half million volumes.

of some 225,000 volumes is housed in a new.

In principle we feel that the undergraduate should be constantly confronted by books a little beyond his grasp, that we are not concerned primarily with his finding specific books

but with instructing him to learn to think, to use the library, and to grow intellectually. Thus when he goes to the shelves for a particular elementary book he finds there also the major standard works on the same subject. What if any of these are written in a language which he does not read or are accounts of original research which he cannot understand? He at least becomes aware of their existence and if he is of the material from which scholars are made, there is just a chance that he might be led gradually into deeper waters. Such an effect cannot be produced if the undergraduate works entirely with a few basic books which have been placed on reserve and in which chapters have been assigned by his instructors, or if he works entirely with a small collection supposedly within his grasp. If the library is thought of as an enlarged textbook only, I do not see how it can be expected to produce a student who has anything but a textbook-memorizing kind of mind. Therefore in the Fondren Library at Rice we deliberately left out any provision for a reserve reading room. Our list of books on reserve at no time reaches more than two or three hundred.

Of course, this concept of the use of the total library as a unit demands that the books on the shelves be arranged in such a fashion that the student may use them easily. To effect this end we have again used an oldfashioned device. The entire collection is arranged strictly according to the Library of Congress classification scheme, with the single major exception of basic reference tools. Now no classification scheme is of course perfect; the important thing in such an arrangement is to follow carefully whatever system is in use. In the Fondren Library all books on physics, for example, including all journals, are shelved in the same area. The student who wants material on nuclear physics finds both the books and the special journals together. Current issues of physics journals are also shelved nearby. We have no periodical room as much. Major reference tools are given prominence by separate shelving, still in the same area. In other words we do have something like a divisional plan, but the divisional library includes not a selection of books and journals, but all materials on the subject and it is arranged so that it falls into its proper place between mathematics and chemistry in the LC system.

Such a system presupposes a building which lends itself to the arrangement: open stacks, adequate reading and study space in each area, some provision for the shelving of current periodicals in such areas throughout the building. On the other hand, it saves a substantial amount of effort in locating books. There is no cumbersome system of location symbols; one does not have to check the card catalog to find the location of a book, if he knows the general area where it is supposed to be. There is one place and one place only on the campus for a particular volume, and that is where the LC system puts it.

Aside from this overall simplification, this arrangement provides several intangible benefits, as I have indicated. It is not only stimulating for an alert student to find books slightly beyond his grasp, but it is also perhaps good for him to see graduate students and faculty members working at the same table and in the same part of the building on problems like his except more advanced. With such an arrangement it is almost impossible for a student majoring in any field to graduate from college without becoming at least familiar with the backs of the major research tools in the field.

Of course this system does presuppose faculty approval and interest. If the class-room instructor merely wishes his student to absorb a specified number of pre-digested pellets placed on reserve, he will resent the fact that his students have to handle ten books to get the one they want. If the instructor

wants his students to see only the best book on a subject, he will not understand the librarian who thinks that students should also see some other books not quite so good and thus learn for himself that the printed word is not always intellible. But if the instructor is interested in teaching the student to think rather than memorize or to study the sources and arrive at his own conclusions rather than accept blindly the opinions of the one "official" text, he will work enthusiastically with the librarian who administers such an arrangement.

I insist again that the provision for the undergraduate library in the university which I am describing is not applicable to every university and is not something new. It seems to me merely a return to some of the principles of those who first developed systems of library classification, an attempt to reduce all learning to some kind of order. I see no reason why we should abandon this simple orderly arrangement so long as it works. It does seem to be working with us. In the space of two years after we set up this system and abandoned a series of departmental libraries scattered over the campus, our circulation more than doubled, although the size of the student body remained the same and the new building provided vastly improved facilities for using books without charging them. For Harvard, the Lamont Library, or something like it, was a necessity. For the library of less than a half million volumes in the smaller institutions to adopt any system which permits students to use anything less than total collection seems just a bit foolish. The function of the university library is education, not facilitating access to the one "best" book on a subject.

By WYMAN S. PARKER

The Vital Core

Mr. Parker is librarian, University of Cincinnati.

My assignment is to comment on the difference between college and university libraries, specifically contrasting a small liberal arts college having a strong library program with a large municipal university having no special undergraduate library policy. In relation to our topic, that of considering a library from the undergraduate's viewpoint, this tends to become an investigation on ways to humanize and make attractive our noble Gargantua, the university library.

College and university libraries do in fact have similar aims. Both are concerned with undergraduate study where the library reduced to its most basic and unromantic terms is a laboratory for discovering facts or a depository of what has been said and thought throughout the ages. However there is always implied the idea that the library is available for the leisurely investigation by the individual of ideas and subjects that are especially intriguing. In other words the library should be a source of inspiration and enjoyment over and above the exact word as promulgated in the class room. Sir Antonio Panizzi in giving evidence before a Select Committee of the House of Commons in 1836 had this ideal well in mind as a function of the British Museum when he said, "I want a poor student to have the same means of indulging his learned curiosity, of following his rational pursuits, of consulting the same authorities, of fathoming the most intricate enquiry, as the richest man in the kingdom so far as books go. . . ."1 In the United States this is carried even further and, although awarding no door prizes as do our movie theaters and gas stations, libraries do try to intrigue the student with exhibits, satisfy him with modern reproductions, and entertain him with music and possibly movies. Most libraries encourage the individual to come and just plain sit in the hope that some of the ideas in nearby books may penetrate by a kind of osmosis. Of course we hope that the sitter will pick up a book, trusting the while that this library novice will not become too interested in it so that he walks out with it illegally. So few of the students ever do take a book out of the library that in moments of despair I sometimes wonder if the \$37.00 average per student operating expenditure for university libraries would not be more immediately appreciated if it were spent yearly in books to be given to each student.

The university library in addition must provide for graduate research. This means more comprehensive and extended coverage on diverse levels. The earlier conception of the university library as a self sufficient entity completely covering all fields of knowledge has gone, hastened on its way by such wise cooperative ventures as the Farmington Plan and the MILC.

There is however a real difference in the

Gt. Brit. Parliament. Sessional Papers. House of

1836, v. 10, p. 399.

actual sizes of college and university libraries. This results primarily in a university library with a large and to the undergraduate bewildering collection of books. Even more pertinent to this discussion is the complexity of the university library card catalog with its millions of entries subdivided in ways best known to catalogers. In fact the catalog of even a small college collection tends to be unintelligible to the average undergraduate. Perhaps we might take a hint from the public library catalog where simplicity is paramount. Another significant difference is the fact that a large collection is usually protected in closed stacks although encouraging signs of a happier trend are seen in the open stack collections at Princeton and Iowa City. Closed stacks make for less spontaneous browsing although the rewards may be greater in the larger collections once the barrier is passed. At Kenyon College we felt happy to have portfolios of the Catlin Indian scenes and Catherwood's . . . Ancient Monuments . . . on the open shelves. Unsupervised rarities are not usually found on the shelves of a university collection although one of our departmental libraries at Cincinnati does have early 16th century Aldines and the Pickering Diamond Classics in its open shelf collection. Such items are usually consigned to the Rare Book Room where the university student can consult even more costly treasures like the Kingsborough Antiquities of Mexico or, in a few fortunate libraries, the Audubon elephant folio.

These complexities of library detail result in the conclusion that it is a privilege for the undergraduate to work in a selected library. This was readily apparent before the turn of the century to Daniel Coit Gilman once librarian of Yale. In his address at the opening of Cornell University Library in 1891, Gilman, then president of Johns Hopkins, said. "What then can keep the shelves from encumbrance? Only constant elimination, convenient storage, frequent rearrangement. The books less wanted must be stacked away, . . . and the books most valued must be brought forward. Constant readjustments are essential to the healthy vitality of a library."2 Certainly this is even more logical these days when our every waking moment entails selection. Why should we not enlist the aid of our professors and our

³ Gilman, Daniel Coit, University Problems in the United States (New York, 1898), 249-50.

librarians in choosing a collection which will represent our basic knowledge which is our heritage? Henry Stevens of Vermont, representing American culture in London as a prominent nineteenth century bookseller, put this very nicely in his usual fresh way. "A nation's books are her vouchers. Her libraries are her muniments. Her wealth of gold and silver, whether invested in commerce, or bonds, or banks, is always working for her: but her stores of golden thoughts. inventions, discoveries, and intellectual treasures, invested mainly in print and manuscript. are too often stores somewhere in limbo, . . . where, though sleek and well preserved, they rather slumber than fructify."3

Certainly our undergraduates should be privileged to see together those books which people of culture consider part of our common knowledge. They should be chosen in generous numbers by each institution's own faculty. The "Great Books" chosen by the Chicago group will be here too but let us not tend toward regimentation especially in the liberal arts. Let us have lots of books and particularly let us not rely on the horrible idea that anything not analyzed to the 102 ideas in the Syntopicon need not be considered. Our collection will not be rigid but will change as do our professors and our trends in literature. For example, we have seen in recent decades the revival of interest in Melville and James and an increasing preoccupation with the metaphysical poets. Our reaction from the sentimentality of the nineteenth century is certainly most apparent in the recent interest in the feverish, feckless, Fitzgerald era and in the currently popular unselective realism of our war novels such as The Naked and the Dead and From Here to Eternity. There is need and room for varieties of expression in our representative col-

There are various ways to attack this problem. The happiest solution seems to be the separate building housing the undergraduate library of which Lamont with its collection of about 80,000 volumes is the prototype. An earlier solution is the separate library within the main university building such as that so successfully used at Columbia, known as the Columbia College Library, with its collection of about 35,000 volumes. Most recent of all is what might

he termed a department-of-all-knowledge area known at Iowa as the Heritage Collection which will have a varying number of books, probably around 20,000 volumes. A comparable scheme which we hope to put into effect at Cincinnati is to set up a separate collection of about 10,000 volumes physically tied in with our special collections. We plan to house this collection in rooms flanked by a popular browsing room and the rare book room, the whole complex of rooms to be open to undergraduates for study and lounging.

Any undergraduate library, no matter where it is housed, would be expected to have its books shelved as an entity. In this fashion the undergraduate has the opportunity to see together those books that form our intellectual heritage. Thus the undergraduate has a touchstone, an ideal collection roughly comparable to the library of a truly cultivated man. Of course this representative library would have its own simplified catalog, its own librarian, and its own reading area.

A municipal university presents a special problem for the call of home is strong and students and faculty have a tendency to evaporate rapidly as the day progresses. Therefore it is apparently necessary to trap the undergraduate between classes or before the comforts of home become too appealing. Thus it is desirable to introduce a more intimate atmopshere than has hitherto been customary so that when the rest room stop has been accomplished the student may be led into other rooms of less necessity and more culture. Once the individual enters the library portals it is possible to intrigue the inquiring mind by means of exhibits which in large cities can be tied up with civic projects and by calling upon both museums and business firms for illustrative and eye-catching material. A browsing room may be utilized as a come-on. Every store has its system of loss-leaders. Why cannot the library buy books of less than permanent nature to attract its students? I think of such items as the books of cartoons, the lavish picture and photograph books, and those all too few books of humorous essays.

Most important in any library is the atmosphere of hospitality where there may be a cordial exchange of ideas and suggestions. There is a special difficulty of communication in a university where so much is occurring in myriad directions. A library wants the special knowledge and support of the faculty

Stevens, Henry, Photo-Bibliography (London, 1878),

and the administration in its programs. In a college the word gets about very quickly as to new attitudes and approaches within the library. It is truly a wonderful feeling to be the focal point of an institution which was briefly the case at Kenyon when we hung an Alexander Calder mobile in the library with an accompanying book display. According to all the books of theory the library is the center of the campus but we all know this as being unapproachably utopian. We occasionally received intimations of such an ideal courtesy of a provocative exhibit which would be discussed in sundry classes. I remember a particularly successful one on the "Horrors of Book-Making" which could have been equally well entitled "Excesses of Taste." Any fresh presentation that stimulates the student to think in new paths is a forward step.

In preparing areas for undergraduates there are fortunately numerous truisms which we find effective in this mid-century period. For example, in physical details such things as alcoves rather than large reading rooms are almost universally preferred by today's students. Modern library design has accepted the fact that movable bookcases make attractive and utilitarian partitions to form alcoves within large areas. Of course, books are our best and richest decorations. (Parenthetically I might add that books are likewise the most satisfactory decorations of the mind.) Soft chairs, footstools, and adequate indirect lighting are all eminently acceptable to the student generation of these days. Individual desks and carrels are very popular with the serious student with special work to get done. Seminar rooms containing a permanent collection in a special area, such as the Elliston Poetry Room at the University of Cincinnati or the Woodberry Poetry Room in the Lamont Library have been found to provoke healthy and profitable discussion. If a faculty member is in the habit of dropping by to chat with the students that makes for even a better brew. Smoking appears to be the most essen-

tial requirement of the undergraduate in this type of area. Rooms for the projection of films, such as those interesting ones released by the Museum of Modern Art, and others for playing recordings are additional attractions for the undergraduate. At the University of Cincinnati we are even now refitting the Stephen Foster Exhibition Room so that students in a comfortable and attractive atmosphere can hear recordings of poets reading their own works. Incidentally I believe that few people can be completely equipped to comprehend the twentieth century unless they have heard T. S. Eliot's majestic rendition of The Wasteland as recorded in the Bollingen series of the Library of Con-

It is the privilege of our newest librarians to carry the word to the undergraduates of a library where books are most easily available and librarians more cordial with an interest in the undergraduate and his problems. Making important and interesting books easily available to students is half our battle. The rest is done at the appropriate time by the skilful suggestion of librarian and professor.

People are naturally curious about books, a fortunate inheritance from the Renaissance when only the privileged could read. Fortunately for librarians, students are interested in books in spite of everything that has been done in the past to discourage them. I do not agree with the late Hon. James Walker who is reputed to have said that he never heard of a girl being seduced by a book. People can be seduced by books although I prefer to say they are stimulated by books. That is why a library should contain all viewpoints and why our Intellectual Freedom Committee is presently so active. I believe in the innate goodness of the human mind and that our students when given the facts will make the right and proper choices and thus continue to build toward a healthy national future.

Name Index Proposed

Dr. Hennig Cohen has offered the South Carolina Historical Society for publication a 276-page name-index of the South Carolina Gazette, 1732-1738. Before accepting this offer, the Society, because of limited funds, must know how many persons and institutions would be interested in purchase of such a publication. Preliminary inquiries indicate that by photo offset, paper-covered copies might be produced at a cost of about three dollars each. Those who are interested in purchase will please address inquiries to The South Carolina Historical Society, Fireproof Building, Charleston 5, S.C.

Alphabetic Subject Indexes and Coordinate Indexes: An Experimental Comparison*

Mr. Gull is a member of the staff, Documentation, Inc.

NE OF THE OBJECTS of this contract is to make an experimental study of classification systems,1 alphabetic subject indexes and coordinate indexes. Because the existing catalogs present difficulties of size, location and security restrictions, a sampling technique was employed. The first comparison was made between the alphabetic subject indexes of the Technical Information Division (TID) of the Library of Congress and of the Document Service Center (DSC) in Dayton and coordinate indexes developed by Documentation Incorporated. Cards were obtained from TID representing 1207 reports cataloged under its Office of Naval Research contract. and cards were obtained from DSC, representing 543 reports cataloged for the Air Force.

All cards found under headings begin-

ning with certain words, such as Antennas, Electric, Electronic and Microwaves, were chosen as part of the sample, because the headings incorporating these words were thought to be the most heavily used headings in the list for unclassified reports and would thus illustrate the maximum concentration of numbers on coordinate index cards that could be obtained for the sample. These cards represented 707 TID reports. The remaining 500 cards were in numerical order, from U20400 through U20899, making the sample 1207 out of 21,000 unclassified TID reports. The subject matter of these cards is so diverse that they are considered representative of the complete subject catalog. The 543 DSC cards were chosen at random and not in consecutive numerical order, thus making the samples equally representative for both catalogs.

Preparation of Sample Subject Heading Catalogs

Sample subject heading catalogs were set up from the two groups of cards, and the following figures were determined from them:

* Technical Report No. s, Prepared under Contract No. AF 18(600)-376, for The Armed Services Techni-cal Information Agency, by Documentation, Inc., Wash-ington, D.C. A comparison of classifications and coordinate in-dexes will be described in a later Technical Report.

Catalog Cards From	Re- ports	Differ- ent Head- ings Used	Subject Head- ing Assign- ments	Average Subject Head- ings Per Report	Cross References Needed				1	Total	Cross Refer-
					To Headings		To Subdiv.		Total	Cross	ences
					See	See Also	See	See Also	Cards	Refer- ences	Per Head- ing
TID DSC	1207 543	1110 899	1950	1.61	630 460	208 67	212 229	25	3025	1075 761	0.97
Fotals or Averages	1750	2009	3307	1.89	1090	275	441	30	5143	1836	0.93

It was not difficult to underline the subject headings on the cards and arrange them in alphabetic order, but it took a great deal of time to establish the cross reference structures for the two samples. The cross references had to be included to make the samples correspond to the original catalogs and to permit comparison of the subject catalogs and the coordinate indexes for reference purposes, as well as to determine the relative difficulty of preparation. The second edition of the Navy Research Section (NRS) List of Subject Headings2 was followed in creating the see and see also references for the TID catalog; for the few headings found on the cards but lacking in the list, the references were made according to the policies used for the List. ASTIA Document Service Center Subject Heading List* lacks the type of cross reference structure of the NRS list, and it provides only seven see references and 28 see also references for the 899 subject headings and none to subdivisions. It was there fore necessary to supply the cross reference structure for the DSC sample catalog, and this was done according to the policies followed in the NRS list. Thus both samples were supplied with all cross references required by the permutations of words in the various subject headings. While it was possible to provide all of the necessary see references, no attempt was made to supply any but the most obvious see also references for the DSC sample catalog, since it is extremely difficult to guess the relationship of headings in a list lacking in its own see also references. The situation accounts for the small number of see also references in the DSC sample compared to the greater number for the TID sample.

The form of the NRS list also indicated

the production of 220 see also references ⁹ U.S. Library of Congress, Navy Research Section. List of Subject Headings, ad ed. Washington. 1950. ⁸ U.S. Dept. of Defense. Armed Services Technical Information Agency. Document Service Center. ASTIA Document Service Center Subject Heading List (Alphabetically), Dayton, 1952. The subject catalog maintained by the Document Service Center has been provided with cross references, even though they are lacking from the printed list. which could not be used in the sample TID catalog as such, but 186 of these are changed to see references and added, leaving only 34 to be discarded. A similar situation prevailed for the sample DSC catalog.

It is particularly noteworthy from these samples that 97 cross references are needed for every 100 TID headings and at least 85 cross references for every 100 DSC headings. These references are required by the inherent difficulties of alphabetic indexes: they must be included for synonyms, relations between headings, and the permutations of words in multiple-word headings.

Preparation of Sample Coordinate Indexes

Certain assumptions about coordinate indexes were current in our thinking when we undertook to prepare the first coordinate index from the TID cards:

- 1. Coordinate index terms should be simple.
- 2. A coordinate index is used by coordinating two or more terms to discover the original materials providing the desired coordination. Coordination is accomplished by any of the logical operations of conjunction, alternation, and negation, or any combination of them.
- 3. In order to make it unnecessary to search the entire index, the record of the original materials should be posted on the coordinate index term cards. Since numbers are very convenient for such posting, the original materials should be arranged in numerical
- 4. Since we lacked the original materials to put in numerical order, a numerical or accessions catalog was essential. The numbers already on the cards were ideal for this purpose.
- 5. Coordinate indexing can be accomplished by manual and mechanical means. The samples described here were made on cards for manual coordination, divided into ten vertical columns according to the terminal digits of the numbers, a device expected to facilitate the coordination of numbers.3

⁸ A sixth assumption was this: The distribution of coordinate index terms into categories will facilitate both the cataloging operations and reference use. Al-though an attempt was made to categorize the terms, this phase of the investigation is yet to be completed.

After the TID file was set up in order by TIP number, the coordinate index was started by considering the card with the lowest number: in this sample, U 23, bear ing the two subject headings-Power meters and Microwaves-Absorption. At this stage, only the subject headings were considered in preparing the coordinate index, and no attention was paid to the titles and abstracts included on the cards. Clearly, the term Microwaves could be used on one coordinate index card and Absorption on another card, and 23 entered on each card in the column headed 3 (for the final digit), but what about the phrase Power meters? If used as a phrase, it is not as simple as if broken into two words, and it requires in an alphabetic file a cross reference from the permutation, Meters, Power. If broken into two words, the specialized meaning of the phrase becomes lost in the general character of the single words, but is recovered when the two words are coordinated, showing 23 to be common to both words. In an attempt to test the assumptions and with a keen realization of the costly, time-consuming character of a cross reference structure, the phrase was broken up into two words, and the next cards were considered. As the work progressed, it soon became a goal to create the coordinate index without any cross references, if possible. However, not all phrases seemed as easy to break into single words, and the progress of the work was marked by indecision and inconsistency. A chronicle of the efforts to solve the problem, and the solution itself, are found in our Technical Report No. 3, November, 19524 The rule for the solution is repeated here because of its importance to coordinate indexing:

"Enter every word in a coordinate index system as a filing word on a single coordinate index card. Whenever in a particular system a word is used in one, and only one, descriptive phrase, enter that word as the filing word on a card, followed by the remaining word or words in the phrase. The word or words following the filing word on any card will themselves be filing words on other cards."

An example shows the practical application of this rule. Given a report dealing with digital computers, two cards are made, one headed Computers and the other Digital. If there are no computers in the system except digital computers, the Computers card is modified to read Computers. Digital. If there is nothing digital in the system except computers, the Digital card is modified to read Digital computers. If later a report is received on analog computers, the card for Computers, Digital is shortened to read Computers and a new card is made reading Analog computers, providing, of course, there is nothing analog in the system but analog computers. The Digital computers card is not affected until a report is received on some other digital device, when the term is shortened to Digital alone.

With this rule for a guide in choosing unit terms, the coordinate index for the TID cards was rapidly completed, with no further problems, and the cards were arranged in alphabetic order. The sample coordinate index possesses these characteristics:

- 1. Every term in the system is a filing term.
- Since there are no subdivisions, every term is on equal footing with every other and can be the subject of a complete search.
- All "see" references required in a standard system, by virtue of the order of words in index-headings, are eliminated.
- All "see also" references from general to specific subjects are eliminated.
- The subjective choice of the indexer between possible permutations of multipleterm descriptions is eliminated.
- Since every word in the system is a filing word and each word in the system appears only once as a filing word, searching for

⁶ Also published as "Unit Terms in Coordinate Indexing" by Taube, Mortimer, Gull, C. D., and Wachtel. Irma S., in American Documentation, 3:213-218, October 1952.

the "proper subdivision" in the proper phrase is unnecessary.

7. Since serial numbers do not reveal the security classification of reports, a single coordinate index can be used for all classifications without compromising the security requirements based on the "need-to-know." 1214 unit terms for the combined coordinate index, since 372 terms were common to both indexes.

The merged coordinate index provided a marked contrast to the sample subject heading catalogs, as shown in these figures:

TABLE 2

Catalog Cards From	Reports	Cards in Sample Subject Heading Catalog	Cards in Separate Coordi- nate In- dexes	Cards in Merged Coordi- nate In- dex	Subject Heading Assign- ments	Subject Headings Per Report	Unit Terms Assigned	Converted to Unit Terms Per Report
TID DSC Common to	1207 543	3025 2118	815 771	443 399	1950 1357	1.61	4249 2317	3 · 52 4 · 26
TID & DSC			i-m	372		-		-
Totals or Averages	1750	5143	1586	1214	3307	1.89	6566	3-75

The new rule made it easy to prepare a coordinate index from the headings on the DSC cards, and both coordinate indexes possessed the same characteristics.

At this stage of the work, the two sample alphabetic subject heading catalogs were of approximately the same quality for reference purposes because of their full cross-reference structures; but they could not be combined easily into one catalog because the headings are uninverted for TID (i.e., Digital computers) and inverted for DSC (i.e., Computers, Digital). Any attempt at combination would require extensive changes on at least one set of cards, as well as new cross references.

Merging the Coordinate Indexes

It was soon perceived that the contrary was true of the two coordinate indexes. Because the terms in each coordinate index were unit terms, and predominantly single words, it was entirely feasible and easy to merge the two indexes into one. Before the merger there were 815 unit terms for the TID coordinate index and 771 for the DSC coordinate index, a total of 1586 terms; but after the merger there were only

The merged coordinate index requires less than one-fourth the number of cards in the two subject heading samples, yet the average number of indexing assignments was doubled, even though the assignment of unit terms was restricted by the policy of creating unit terms from the subject headings only.

Improving the Quality of Coordinate In-

It was recognized that an improvement in quality could be obtained for the merged coordinate index by

- Assigning additional unit terms based on information obtained from the titles and abstracts on the cards, or
- Assigning additional unit terms based on titles and abstracts on the cards plus a review of the original documents.

The second alternative was not tested, under the assumption that it would be too expensive an undertaking for any large collection of documents, but an investigation of the first alternative was undertaken. A new merged coordinate index was created from a sample of 200 cards, comprised of 100 DSC cards (the lowest numbers in our

non-consecutively numbered sample) and 100 TID cards (U20200-U20299). Since all unit term assignments required by the subject headings were retained, the base of the new coordinate index was identical with the old coordinate index for these 200 cards. The preparation of the new index revealed that 388 unit terms were used for the 200 cards in the old merged coordinate index. The review of titles and abstracts resulted in the use of 90 terms already in the old merged coordinate index and in the addition of 117 new terms, bringing the

sum "access points." The following Table has been developed to show per report the comparison between subject headings, access points, converted unit terms, and unit terms resulting from improved coordinate indexing.

It is interesting to note that while the DSC reports have more subject headings and more converted unit terms per report than do TID reports (2.50 to 1.61 and 4.26 to 3.28, respectively), they have fewer unit terms after a review of titles and abstracts (5.64 to 6.88). As an explanation

TABLE 3
PER REPORT

	1	2	3	4	5	6	7	8
Catalog Cards from	Subject Headings	Times Cross Refer- ences Per Heading	Equals Cross Refer- ences	Access Points (1+3)	Column 1 Converted to Unit Terms	New Assign- ments of Existing Unit Terms	Assignments of New Unit Terms	Unit Term Assign- ments (5+6+7)
TID	1.61	0.97	1.58	3.19 4.62	3.52 4.26	2.69	0.91	6.88 5.64
Averages	1.89	0.91	1.72	3.61	3.75	1.82	0.67	6.24

total to 595 unit terms. The average number of unit term assignments was increased from 3.52 to 6.88 for each TID report and from 4.26 to 5.57 for each DSC report, or an average of 6.24 unit terms per report.

This last average is three and a quarter times the average number of subject headings per report, and it indicates that the depth of indexing is much greater for coordinate indexes as we assume from this test they would be prepared than for the conventional subject heading catalogs as they are now prepared. This difference is not as great as indicated here, since the conventional subject heading catalogs provide access to reports by means of cross references in addition to entry under the headings. Lacking an accepted terminology for the sum of subject headings plus cross-references for any report, we are calling this

of this situation, we conjecture that it is probable that the DSC policy of assigning headings liberally assures a better conversion to a coordinate index than does the TID policy of restricting the assignment of headings, but that the TID abstracts are more informative for indexing purposes than the DSC abstracts.

If a search of a subject catalog is considered from the viewpoint of an average TID report, it will be found entered under 1.61 subject headings and access to it will be provided under 1.58 cross references, or a total of 3.19 access points, compared to 3.52 entries when the same subject headings are converted to unit terms.

A similar comparison for DSC cards shows 2.50 subject headings plus 2.12 cross references per report, or a total of 4.62 access points per report compared to 4.26 entries per report when the same subject

headings are converted to unit terms. If the pattern of the TID cards had been repeated, these should have been five or more unit terms per DSC report, rather than 4.26. An examination of the subject headings on the DSC cards reveals why there are fewer unit terms than access points, for many of the reports are assigned overlapping headings with certain words in common which are used only once in converting to unit terms, for example, Meteorological equipment and Meteorology—Research, in which four words (or four access points when cross references are included) reduce to three unit terms:

- Meteorology; Meteorological (on one card)
- 2. Equipment
- 3. Research

Since the number of access points is equal for all practical purposes to the number of unit terms for both catalogs, it might be assumed that a coordinate index whose terms are converted directly from subject headings offers no advantage in reference use over a subject heading catalog, but this assumption is incorrect for these reasons: ble, the value of converting subject headings to unit terms can be measured only as shown above, although demonstrations performed with the samples indicate that the reference advantage of this level of coordinate indexing is considerable.

The value of improving the level of coordinate indexing by considering titles and abstracts of reports in addition to converting subject headings has been demonstrated, however, in unit terms per report. If it is assumed that the average of 6.88 unit terms per report is the optimum for coordinate indexing of the 100 TID reports (and here we recognize that all cataloging and indexing are subjective accomplishments), then 2.69 terms per report of this total are assignments of unit terms already used in the previous sample-in other words, unit terms under which the searcher would expect to find reports but under which he would not find them in a subject heading catalog or in a coordinate index prepared by converting subject heading assignments. The same condition applies to 0.95 unit terms out of the average total of 5.64 unit terms for the 100 DSC reports. New unit terms were needed for both sets of reports: 0.91 unit

Coordinate Index

- Reports are listed on all cards consulted, for there are no cross references and no subordination of words.
- Unit terms can be freely combined in the searching process, thus providing combinations to meet each searcher's need, i.e., more generic or more specific searches.
- The searcher is certain that he has access to all reports listed under a single word.

Subject Heading Catalog

Reports are listed under subject headings only
—just over half of the access points—and not
on the cross references—the remainder,

Combinations of words are frozen because of the use of multiple term subject headings and cross references.

Because no cross reference system includes all permutations of words in the headings, the searcher is never certain he has access to all reports to which a word applies.

The searcher is interested in how many reports can be provided to meet his particular need with the least effort and time, rather than in the number of access points or unit terms per report. An extensive comparison of subject catalogs and coordinate indexes for reference use is planned, but until the statistics are availaterms per TID report and 0.43 unit terms per DSC report. Thus the review doubled the unit terms used for the TID reports (from 3.28 to 6.88) and increased those for the DSC reports by one-third (4.26 to 5.64), and these figures are a measure of the superiority of this level of coordinate indexing over subject headings.

Some Problems of Scientific Book Publication*

Mr. Benjamin is president, McGraw-Hill Book Company, Inc.

When I was asked to take part in this program on the theme "Problems of Scientific Publication," I accepted readily, for, frankly, I felt I was just the man. I say this because the scientific book publisher nowadays is full of problems, and having a weakness for the spoken as well as the written word, he likes to talk about his problems. Indeed, many a book publisher is like one of A. P. Herbert's fellow Members of Parliament about whom Mr. Herbert remarked, "He is the kind of man who can always be depended upon to find a problem to every solution."

Today, we publishers of scientific books find that most of our problems, and most of the problems to the proposed solutions to these problems, are economic ones. They involve rapidly mounting production costs, and failure or inability to adjust prices to meet these costs. Also, they involve the phenomenon of increasing scientific specialization, under which markets for specialized books have remained relatively small in spite of the tremendous growth in the total field of science and the total numbers of writers and buyers of scientific books, Also involved is a distressing lack of technological improvement in methods and machines for type composition, especially for composition of mathematical, chemical, and other symbolic scientific matter.

*Paper presented at meeting of Pure and Applied Sciences Section, ACRL, New York City, July 3,

I should not take your time this morning for a discussion of these dismal economic problems, for I could only repeat what I said in an article published in a recent issue of *Physics Today*. If you are interested in these economic and technical matters, you can read this article in a few minutes. But before you do so, I should perhaps help you to evaluate it by quoting from a paper of one of your distinguished colleagues, Dr. Vernon Tate:

In the April number of Physics Today, Mr. Curtis Benjamin, President of McGraw-Hill, published an interesting and provocative article entitled, 'What Price Scientific Books?' An abstract of the paper states, 'Many specialized scientific books which should be published for the general good of science cannot be accepted for publication because of high printing costs and their limited audiences. What is needed is a research program carried out by the publishers themselves that will aim at reduced costs and increased speed in printing scientific material.' Mr. Benjamin's argument is well phrased, shrewdly designed, interestingly presented and completely fallacious.

Of course, my face was inappropriately red at Dartmouth when your colleague finished this evaluation. I soon recovered, however, when Dr. Tate read on and I discovered that he thought my argument was fallacious because necessity, the urgent necessity of science, would surely find a way to solve these problems which have bothered me and other publishers of scientific books for several years. Dr. Tate says:

Any needed scientific or technical book or communication can be published today in an edition sufficiently small to meet the needs of the field and at costs that are within the realm of possibility. Please note the emphasis on the word published. If the break-even point for a conventional book is 8,000 copies, and the market will absorb only half of these at current rates, including a fair profit for the entrepreneur, then a conventional book is not what is needed, or perhaps conventional channels of publication are not adequate. If author, publisher, librarian and user cannot convince themselves of this elemental fact, we are indeed due for trouble.

Now, frankly, I in turn was not convinced by Dr. Tate's argument and assurance. Maybe you would be both convinced and comforted by his article.

Now, I want to turn next to a publishing problem which might be discussed under the heading "The Rising Tide."

In recent years I have heard librarians, and many scientists, too, rail against the rapidly rising tide of scientific literature. Indeed, there is a general tendency to deplore the volume and berate the density of this tide. Many people, including librarians, have thrown up their hands and exclaimed, "This is a senseless and wholly unmanageable flood. How can we expect to cope with it? Something must be done to stop it, or at least to check it, or maybe to channel it in a different direction, or something...."

This is, I think, an unrealistic and unreasoned attitude. The tide of scientific literature in America is neither higher nor stronger than the tide of science itself. In deed, the tide of literature has lagged behind the rising tide of science. The fullest flood of books, monographs, reports, symposia, pamphlets, articles, indexes, digests, and abstracts is yet to come. None of us should waste any time in deploring and berating. We should bend all our efforts to coping.

Whenever and wherever this problem

has been discussed, there always has been much talk of the evils of duplication in scientific literature. Many people seem to be convinced that duplication is an unnecessary evil, and that if this great evil could somehow be eliminated, the problem of publishing, cataloging, housing and using scientific literature would be easier to solve.

While the great waste of time, effort, and expense is readily evident in the seemingly pointless duplication of publications in almost every field of science, I cannot join those who sadly deplore this situation and strongly feel that something must be done about it. The problem is obvious: Who will do the eliminating of the offending publications? What man, or what group of men, is so wise as to say generally, "We already have enough publications on this subject. No more should be produced." Or, more specifically, who is so wise, or so sure of himself, as to say to an ambitious young scientist, or even to an energetic older one, "Look here, young man (or old fellow), many of your peers and superiors already have written good books in this field. You must not indulge yourself in the wasteful effort of trying to write another."

While there usually is no direct correlation between the quality and the quantity of publications in a given field of science, I am sure that, in the long run, the quality would suffer if the quantity were arbitrarily rather than naturally restricted. In the administration of justice it is generally agreed that it is better that ten guilty men should go free than one innocent man should suffer unjustly. For my part, I would rather encourage ten, or even twenty, seemingly pedestrian authors than to risk the discouragement of one who might make a genuine and original contribution to his field. Indeed, it seems to me that the great advances in scientific literature have been made by striking individual mutations rather than by systematic stages of evolutionary progression.

I have just spoken of the natural restriction of scientific publications. By this I mean the kind of restriction that prevents the publication of many manuscripts in the free competition of normal commercial publication. As I indicated earlier, economics is a large restrictive factor. Unhappily this factor operates most decisively against advanced and specialized publications which are likely to be of the most value in advancing the front of science. Many scientific books cannot be published because markets are too small and production costs are too high. (In this connection it is interesting to note another curious phenomenon: more often than not there is a startling inverse ratio between the size of the potential market for a scientific book and the size of the printer's bill. The most highly specialized scientific publications usually contain the largest amounts of complicated mathematical or chemical matter, and hence are the most costly to produce. This vexing phenomenon does not operate in the publication of monographs and specialized treatises in the humanities and social sciences, which may explain why so many university presses stick pretty closely to highbrow books in those fields.)

Two other restrictive factors in the natural selection of scientific books are (1) lack of technical accuracy and originality, and (2) lack of literary competence, not to say elegance. Fortunately, these two factors operate most decisively against textbooks and general treatises at the elementary and intermediate levels.

Recently a well-known librarian read a brilliant paper which revealed his deep concern over the enormous volume of current scientific literature, the copious duplication of titles, and the onerous job which faces the librarian in trying to separate "the froth from the substance." I wondered then, as I often have before, whether librarians in general realize how deep is their debt to book publishers for assistance in this onerous separation process. Well, I can give you a rough idea. The firm with which I am connected publishes about 300 new and revised books a year. This number is selected from a list of about 2700 published titles and an annual offering of 5000 to 6000 new manuscripts. Now, I realize that our 300 titles in any year contain quite a bit of froth, and I know that we reject each year much real substancewhich is, of course, quickly snapped up by our more astute competitors. I hope, however, that this rough indication of one publisher's ratio of separation will give you both comfort and courage in your own battle against the rapidly rising tide.

One further observation in this connection which may give you additional comfort: scientific literature is wholly free of "vanity" publishing. You do not have to cope with the numerous author-financed volumes which are published each year in poetry, in the polite letters, and in the unpolite controversial areas of economics and politics. For this you should, perhaps, thank the scientists more than the publishers. As a rule, scientists are both fiercely proud and moderately poor.

Another problem faced by the publisher of scientific books has a direct relation to Dr. Sunderlin's interesting and informative discussion of the National Research Foundation. This problem is posed by the flight of scientists, and hence of potential authors of scientific books, to government research agencies. Facts and figures on the extent of this flight have been widely published in recent months; I am sure they are well known to most of you. Proportionately more scientists are now working, either directly or indirectly, for the federal gov-

ernment than there were at the height of World War II, and, we are told that the new peak has not yet come.

A measure of the rapid growth in this new peak can be found in the following figures which were recently published by the National Research Council. Total federal expenditure for research at the height of the World War II program in 1945 was \$880 million. By 1950 this expense had climbed to \$1,040 million. It was \$1,310 million in 1951, and is estimated to be \$1,640 million this year, with a substantial increase ahead for next year.

Further it is estimated that 56% of the total research in the country is now financed, either directly or indirectly, by the federal government, and this figure is expected to increase to 70% or 75% within the next few years. This means, of course, that 70% or 75% of the country's scientists will be working for the government—or this should be the proportion if the government is getting a proper return of brain power for its dollar expenditure. What's more, this 70% or 75% will include most of the ablest scientists in the land. Patriotic and financial considerations will insure this—and this is, of course, as it should be.

Now, just how does this flight affect commercial publication of scientific books? The answer is rather obvious: it takes large numbers of top scientists off the market, so to speak, as far as private authorship is concerned. The reason for this is to be found in an antiquated public law, Section 111 of Title 44, U.S. Code, which was enacted many years ago and which has since been amended in many minor respects but never thoroughly overhauled and modernized to meet modern conditions and requirements. As all of you know, this law requires that all printing for government agencies (other than the Supreme Court and the National Science Foundation), or for private agencies operating with government funds. must be done by the Government Printing Office, or under a hard-to-come-by waiver from the G.P.O. or the Joint Congressional Committee on Printing. It follows that under this law, all the results of research done by the thousands of governmentemployed scientists must be published or printed (most government agencies make no distinction between these two functions) by the G.P.O. This monopoly—and to my way of thinking it is one of the world's largest and most effective monopolies-has cancelled in each recent year a higher proportion of the publisher's normal source of scientific manuscripts.

Now, before I pursue this point further, I want to comment briefly on Title 44 of the U.S. Code and on the administration of the G.P.O. under its authority—and I hope you will pardon my obvious prejudice if I sound a bit caustic.

First, I think the law is unreasonable and discriminatory in its designation of printing as the only commodity or service which one government agency must buy from another government agency. The executive and military departments of the government can buy anything and everything under the sun except printing. The Navy, for example, can buy anything from a battleship or a super-bomber down to hairnets, fish hooks, and toothpicks—but it cannot buy printing, not without a waiver under the strictest interpretation of the law.

Second, this law embarrasses and handicaps operating officials in almost every executive and military department of the government. They hate its restrictive and delaying influence on their operations, but they dare not oppose it, or even to cry out against it. The G.P.O. is run by a powerful Joint Committee of Congress, and appropriations for the executive and military departments come from Congress.

Third, the administration of the G.P.O., under this law, permits widespread petty patronage and substantial waste of public funds. Not many years ago Congressmen gave away packages of seeds-now they give away nicely bound books. (The voluminous and costly yearbook of the Department of Agriculture is a favorite item to gladden a voter's heart.) The amount of waste resulting from overprints that are produced for sale by the Superintendent of Documents, if it could be accurately reported, would upset taxpayers throughout the land. I know of no recent figures on this, but as some of you remember, LeRoy Charles Merritt, in his The United States Government as Publisher (University of Chicago Press, 1943), reported that in 1940 only 141% of the copies printed for this purpose were sold. James L. McCamy, in his admirable Government Publications for the Citizen (Columbia University Press, 1949), reported that in the fiscal year 1947. sales income compensated for only 14% of the cost of government publications produced for sale by the Superintendent of Documents in that year. (I hope you will please understand that in citing these figures, I am not blaming the Public Printer. He is an experienced man who knows his business. Nor am I blaming the Superintendent of Documents. He is a bright, energetic young man who seems to be giving his best effort to his job. I do blame the law, the organizational system, the administrative policies, and the political traditions under which these men have to operate.)

Now, as suggested earlier, Title 44 does provide exemption under which official documents, scientific and otherwise, may be published by private firms. The law exempts quite specifically "such classes of work as shall be deemed by the Joint Committee on Printing to be urgent or necessary to have done elsewhere," and which presumedly should be done elsewhere in the interest of the public good.

The trouble here is that the administration of the law has been so rigorous as to permit very few exceptions in recent years. Most of the exceptions which have been permitted have come in wartime (that is "official" wartime, not "police-action" wartime) and under great pressures or quasilegal devices.

I strongly feel that this law needs fundamental revision in order to permit the executive or military departments to contract with commercial firms for production and distribution of many government publications which can and should stand on their own feet financially. Until this can be done, the Joint Committee's regulation of printing under the present law should be relaxed to permit more exemption "for the public good." It goes without saying that this should be done with the usual safeguards against abuses.

There are many arguments—involving matters of law, private rights, and public morals—for and against this proposed legal reform. I shall not attempt to give them even a lightly-once-over treatment here, but I should like to indicate some of the advantages which would accrue from reform, primarily to scientific literature, secondarily to commercial publishers of the same, and tertiarily to the taxpayer. (I place the publisher in a secondary position because he is also a taxpayer, and hence any reform would compound his benefit.)

First, if allowed to do so, commercial publishers could help materially in relieving some of the great pressure for quicker publication of unclassified government research. As entrepreneurs, we could not, of course, publish primary research reports in great numbers, but now and then such reports can be made to support themselves

commercially. We could, however, publish commercially vast quantities of secondary reports and other literary by-products of government research. I refer to such materials as the M.I.T. Radiation Laboratory Series, the A.E.C.'s National Nuclear Energy Series, the Rand Corporation Series, and other similar projects which we at McGraw-Hill have undertaken at our own expense. I refer also to such volumes as the famous Smythe Report, which was published so successfully by the Princeton University Press, and the more recent Glasstone Source Book of Atomic Energy, published so successfully by the D. Van Nostrand Company.

If commercial publishers were permitted to produce many more official publications such as these, this would allow the government research agencies and the G.P.O. to devote proportionately more of their time, funds, and production capacity to the publication of primary research, both classified and unclassified.

Second, and almost equally important to all of us as taxpayers, commercial publication of self-supporting scientific and technical documents of government origin would save annually thousands upon thousands of dollars of federal funds. I hope you will pardon me if I again refer to the Radiation Laboratory Series as an example of what can be done in this direction. At a rough estimate, the government has a net saving of approximately \$260,000 in the avoidance of the production cost of these 27 volumes as official technical reports—reports which were required of M.I.T. under

their O.S.R.D. contract. This figure represents the estimated cost of composing, printing, and binding 500 copies of each volume as an official technical report, which would have been done normally at government expense. The publisher assumed all this manufacturing cost and in addition has paid over \$120,000 into the U.S. Treasury as royalty on sales to date. Thus the commercial publication of this series alone already has given the U.S. Treasury-and the U.S. taxpayer—a total benefit of \$380,000. Add to this sum the amount of tax paid by the publisher on his profit from sales of these official reports, and add also the anticipated royalty for the next few years, and one would be rather safe in estimating that, in the end, the total benefit to the U.S. Treasury will be well over onehalf million dollars. Of course this particular performance could seldom be matched, but with the present legal and regulatory restrictions removed, scores of smaller publications might more than match this saving annually.

Now, I have only sketched this problem in its broadest outlines. You may be sure that we publishers are pressing our arguments on our, and your, public servants in Washington. Of course, we have been accused of having special interests, and naturally we have been the first to admit the obvious truth of this charge. I hope that you—all of you librarians—will feel that you, too, have special interests in this problem, and that you will see fit to support our arguments whenever and wherever an opportunity presents itself.

Proposed Statement of Principles to Guide Large Scale Acquisition and Preservation of Library Materials on Microfilm

Introductory Note

THIS STATEMENT of principles was pre-Microfilm Projects, a subcommittee of the Board on Resources of American Libraries. which was created by the board in 1950 in response to a need for long-range planning to save valuable manuscript and printed records in danger of loss through physical deterioration or the ravages of war. Members of the committee are: Ralph Carruthers, New York Public Library; Donald Coney, University of California; John Cronin, Library of Congress; Herman Fussler, University of Chicago; Lawrence Kipp, Harvard University; Charles Mixer, Columbia University; and B. E. Powell, Duke University (chairman). Robert B. Downs, University of Illinois, was the committee's first chairman,

The committee agreed at the outset that its first efforts should be devoted to outlining the scope of the job of recovery and preservation, and to the preparation of a statement of principles by means of which libraries and librarians might be aided in the selecton and mcrofilming of research materials. This is the statement. It suggests some of the areas in which microfilming programs are urgently needed and sets down conditions which must exist if a comprehensive program is to yield maximum results.

While the statement was in preparation, the committee decided to select a specific body of materials which everyone recognized as important and concentrate on the development of a program to preserve it. United States newspapers of the woodpulp period (since 1870) were chosen. Representatives in each of the 48 states were appointed to direct selection of the state's most important papers not already filmed. Lists were received from most of the states and have been published by the Library of Congress. Copies have been distributed to state library associations, historical societies, and other state agencies, with an appeal that they cooperate in filming and in stimulating the filming of their state papers appearing on the list. The Committee hopes that each state will be responsible for filming

its papers, and that the state agencies acquiring copies will make them available for loan. In this manner, unnecessary multiplication of positive copies can be avoided and all available funds utilized to extend the copying program. Anyone interested in assisting with this program may secure additional information from the president of his state library association, or from members of the Committee.

The Committee will keep its eye on the newspaper project, but will turn most of its attention from now on to the copying of other materials in immediate need of preservation.

—B. E. Powell, chairman, Committee on Cooperative Microfilm Projects.

STATEMENT

The modern hazards of war are such that civilization risks the total loss of valuable manuscript collections unless a coordinated effort can be made to reproduce important manuscript collections and locate the copies at points far distant from the originals. One may then hope that either the originals or the copies will survive. Substantial bodies of printed materials are exposed to the same dangers. But some of these printed materials, particularly domestic and foreign newspapers of the woodpulp period, disintegrating periodicals, and out-of-print books face even more certain destruction through physical deterioration. Some progress has been made in conserving these materials through uncoordinated microfilming projects which have resulted in the deposit of copies of large numbers of manuscripts and extensive series in collections located in Europe and elsewhere. Microfilming efforts are also under way to preserve many of the outstanding domestic and foreign newspapers. And limited projects have been instituted to film early American and English periodicals. But any filming program dependent exclusively upon random selection and chance opportunities is likely to lead to the dissipation of available financial resources without a commensurate increase in either general security or accessibility. If this vast wealth of research material is to be salvaged and made accessible a more systematic attack on a larger scale is essential.

Preservation of Library Materials

Perhaps the most pressing needs to which inter-library cooperation in microfilm projects would contribute relate to the preservation of library materials, specifically, and in descending order of priority, to the preservation of (1) domestic newspapers of the woodpulp period. (2) disintegrating periodicals, and (3) out-of-print books. In each of these fields there have been beginnings, commercial or otherwise. Indeed, in the field of newspaper microfilming vigorous programs are under way in several states where numerous papers have been and are being filmed by various libraries, commercial microfilming agencies and publishers. However, despite the relatively high interest and activity in this field, there is need for further planning which will augment current activity and resources and will induce a greater number of libraries, associations and other organizations which are interested in the preservation of the record of our civilization to assume a share of the responsibility for that preservation.1

Toward this end, this committee is endeavoring to secure from each of the forty-eight states appropriate lists of the newspapers (metropolitan, weekly, county, labor, foreign language, Negro, etc.) which have been microfilmed and of others to whose preservation highest priority should be given. The Committee is also endeavoring to stimulate particular libraries which have an interest in specific newspapers to undertake responsibility for filming them. Even with this effort, however, it seems unlikely that available resources will suffice for a fully satisfactory rescue operation in the field of domestic newspapers.

Nevertheless, plans for preserving domestic periodicals ought not to be postponed until newspaper programs are well launched. To be sure, the number of domestic periodicals which are rapidly deteriorating is far smaller than the number of deteriorating newspapers not only because of the better quality of the paper on which they have been printed but also because the greater convenience of their format more adequately protects them. Nevertheless, there are titles among the domestic periodicals which should receive prompt attention or shortly there will be no extant copies suitable for filming. Lists should be compiled of foreign newspapers and of domestic and foreign periodicals urgently in need of salvage operations and priorities for their microfilming established.

It must be recognized that the problem of physical deterioration of woodpulp books and periodicals is now with libraries permanently. Long range plans for alleviating the situation must therefore be adaptable to incorporation into the regular fabric of the library economy. The even greater problem of preservation of foreign materials is covered implicitly in the following section on large scale acquisitions programs.

Large-Scale Acquiitions Programs

The Committe shares with the Library of Congress a conviction that it is important that there be a planned program for copying large bodies of source materials in the countries of Western Europe and other parts of the world, as described in the following paragraphs, and hopes that many of America's research libraries will find it possible to participate in such a program.

The national microfilming program should be comprehensive and developed in detail as to method, type of operation, spheres of influence, priorities, and similar matters. It likewise should be flexible enough to permit alteration in nature, scope, duration, etc., without disrupting the basic structure of the program. Beginning with a statement of objectives this plan should progress through a survey of information and an analysis of all known factors, and conclude with a recommendation for action.

⁵ Recently, the University of Kentucky Library circulated a list of most frequently cited periodicals and inquired into the the interest of research libraries in subscriptions for them in various forms of reproduction. This commendable type of activity should be expanded on a planned basis. It relates to acquisitions as well as to preservation.

panied on a planned basis. It relates to acquisitions as well as to preservation,

^a The Library of Congress has taken systematic measures which are preliminary to a planned program for copying large bodies of source materials in Western Europe. This action has resulted from the conviction that a primary requirement of American scholarship is ready access to information concerning the collections of materials, published or unpublished, in the libraries, archives and similar institutions of Europe. In 1950 the Library sent a member of its staff to Paris as the base from which to embark upon the major assignments

¹ The immensity of the newspaper problem is reflected in the holdings of the Library of Congress in 10th and 20th century woodpulp newspapers which total over 67,000 bound volumes. To microfilm these would require over 67,000,000 exposures at a cost of roughly \$2,000,000 for a negative and positive print. Even if the newspaper preservation program were to limit itself during the forsecable future to the filming of 10th century domestic newspapers, the resources of the Library of Congress would suffice only for a fraction of the total work to be done. On its own, the Library can undertake only the filming of certain large metropolitan dailies whose existence has been of major consequence as sources for our national history. The preservation of other papers must be left to the conscience and enterprise of the research I braries with strong interest in their regions, to the state and local libraries and the historical societies.

Despite any planned program to acquire research materials in microfilm form there will be other favorable opportunities to obtain valuable source materials at moderate cost through cooperation with organizations whose activities abroad permit including microfilming projects without normal overhead expenditure, e.g., the Library of Congress projects on Mt. Sinai and in Jerusalem. Additionally. particular opportunities to perform "rescue operations" by filming bodies of important materials which are likely to be destroyed or closed indefinitely to western scholarship will merit serious consideration as they occur. It is clear, however, that any acquisitions program dependent exclusively upon such chance opportunities will exhaust the financial resources of American libraries on a miscellany of unrelated projects; and it is equally apparent that a world-wide program planned to bring to this country copies of all valuable source material which may be soon lost to us would require the expenditure of sums greatly in excess of the resources available to our libraries for such purposes.

Action Needed by Research Libraries

The urgency and scope of the problem are

of the mission; namely, the dissemination of the Li-brary's philosophy of cooperation in ascertaining and sharing information, in acquiring and sharing ma-terials significant for research; and the surveying of quantities of unpublished bibliographical tools in arterials significant for research; and the surveying of quantities of unpublished bibliographical tools in ar-chives, libraries and similar institutions with a view to future microfilming projects. Correlative assignments were the compilation of data on microfilming facilities

were the compilation of data on micronium and on the accessibility of materials for examination and for copying.

In the execution of these assignments the Library's In the execution of these assignments with the Division of the compensation of t and for copying.

In the execution of these assignments the Library's representative established liaison with the Division of Libraries at Unesco; acquanted himself with the survey of information on microfilm equipment which was being conducted by Unesco and with the survey of information on microfilm equipment which was being conducted by Unesco and with the survey of facilities which was being compiled by the International Federation for Documentation in addition to making independent inquiries; spoke briefly at several international conferences and at a meeting of archivists and special librarians; called upon the directors of more than 100 institutions in Austria, Belgium, England, France, Germany, The Netherlands, Scotland, and Switzerland in order to gather at first hand easential information on the existing unpublished bibliographics, guides to collections, inventories, calendars, indexes and smilar means of access to information; recommended priorities for suggested copying projects; and, finally, placed an extensive order at the Archives Nationales in Paris. The result of the survey is embodied in a publication entitled Unpublished Bibliographical Tools in Certain Archives and Libraries of Europe: A Partial List which the Library of Congress issued in October, 1952 and which has been distributed to the major research libraries of the United States and which is available to others upon application. Libraries will be encouraged to allocate funds for filming those items of special interest to them. The Library of Congress is prepared to devote as much of its resources as obligations of higher priority will permit to the reproduction of them bibliographical aids. Active participation of other libraries will be incouraged to allocate funds for filming those items of special interest to them. The Library of Congress is prepared to devote as much of its resources as obligations of higher priority will permit to the reproductor of them bibliographical inde. Active participation of other libraries will be produ outlined above. Research libraries are urged individually to take an active, continuous and systematic role in its solution through action as follows:

A. Adoption and adherence to the principles to govern microfilming activities and services set forth in this Statement.

B. Regular and continuing allocation of a portion of each year's book funds to microfilm projects. Research libraries should agree to purchase positive film copies of materials only when needed for continuous reference, using available funds primarily for making negative copies of printed and manuscript matter not hitherto filmed. (The percentage allocated need not be large, and regular use of from one to two percent of book budgets by each of the nation's research libraries will support sizeable expansion of microfilming activities.) Each library should select its projects first with its own needs in mind. A secondary consideration will be the requirements of national scholarship in general. Where no compelling local need dictates the project, the library can determine an appropriate annual one (or a longer-range project to be completed in annual installments) by:

(1) Consulting with the state representative of the Committee on Cooperative Microfilm Projects to select newspapers which need microfilming.

(2) Selecting one or more items from the Unpublished Bibliographical Tools in European libraries to be copied, or

(3) Consulting with the Library of Congress Union Catalog Division regarding cooperative projects under way or being planned by other libraries in which the library may participate.

C. Active participation with the Association of Research Libraries, the Library of Congress, state library associations, and other learned societies and associations in initiating and supporting requests for foundation and governmental grants to support microfilming projects aimed at preserving disintegrating research materials like those identified in this Statement or at bringing to this country in film form research materials which are not now available here.

Principles

Only through an organized cooperative program, backed by libraries and other institutions, can acquisition and preservation of the scope envisioned be accomplished. And under-

lying any broad program of cooperation in which numerous libraries and agencies share the expense, work, and product of microfilming activity, there should be basic agreement on the technical standards which will obtain; on policy with respect to the pricing of positive copies of microfilm, in order to share equitably the cost of the program; and on the ready accessibility of microfilm for the use of scholars.

The Committee has agreed upon the following principles which should be followed if maximum effectiveness is to be achieved:

TECHNICAL STANDARDS

Good technical standards are essential to any large scale microfilming project. A satisfactory set of tentative standards for microfilming newspapers has been prepared for the Association of Research Libraries. The Committee endorses its use. Standards to cover. in greater detail, this and other aspects of the microfilming program envisioned by this Committee are being prepared by the ALA Committee on Photoduplication and Multiple Copying Methods.

PRICING

On the assumption that it is reasonable for a library sharing access to material through owning a positive microfilm print to pay a share of the negative's cost, the Committee proposes the following principles on pricing:

(1) A library owning a master negative may include in the sale price of all positive prints to other libraries or to individuals whatever portion of the negative cost it considers necessary to equalize the cost of producing the microfilm copy. Once the markup for sale of positive prints from a master negative has been established, it will be continued for all subsequent sales so as not to inflict an inequity upon early purchasers or subscribers.

(2) The sale price to non-participating libraries or to individuals of positive prints from master negatives produced in the course of a cooperative project will be fixed by the cooperative agreement.

(3) An organization lending materials for microfilming by another library will not expect to receive in return a free positive or other compensation. (In case this is necessary in foreign microfilming, the cost will be considered as part of the negative cost.)

(4) Nothing in this section shall be construed as contravening the normal profit included in the price of microfilms established by any library.

ACCESSIBILITY

It is important that the results of the program be made as accessible as circumstances will permit. To this end the Committee recommends the following principles on access:

(1) Permission to read. Libraries should make microfilm as accessible as they would original materials of similar nature.

(2) Permission to copy original materials. The owning library should not impose limitations on the accessibility for reproduction of material in its collections unless the nature. status, or physical condition of the material makes copying inadvisable.

(3) Loan of microfilm. Any film, positive or negative, which can be replaced easily should be made available on interlibrary loan. The Committee approves and recommends to libraries the principles set forth in the report of the ARL Committee on Inter-Library Lending of Microfilm.4

(4) The reproduction of film copy. Although the owning library itself should not impose limitations on the accessibility of micro-

(Continued on page 302)

⁴ The Committee on the Inter-library Lending of Microfilm favors a liberal policy of microfilm lending. The principal provisions of such a policy are set forth below. It should be borne in mind that any one pro-vision listed below is subject to limitations implied in the other recognitions.

vision listed below is subject to limitations implied in the other provisions.

a. The conditions of loan set forth in the proposed (Approved by ALA Council, July 1952) revision of the ALA Interlibrary Loan Code under Part I: Principles and Policies should apply to the interlibrary lending of microfilm. Specific reference is made in Part I of the Code to the purpose, responsibilities, expenses, and duration of interlibrary loans.

b. Positive microfilm should be lent freely and without restriction.

b. Positive microfilm should be tent provided the out restriction.
c. Negative microfilm should be lent provided the lending library owns the original, or has easy access to the original for re-photographing, and provided the original is not so fragile that re-photographing would damage it. Extreme care should be exercised in handling negative microfilm.
d. Microfilm of manuscript material owned by another library should not be lent without the permission of that library except in instances where it is quite obvious such permission is unnecessary. The use of such

voids such permission is unnecessary. The use of such material should be subject to the conditions imposed on the borrowing library by the report of the Committee on the Use of Manuscripts (Appendix B, p. 32, "Minutes of the 37th Meeting of the ARL, Chicago, July

utes of the 37th Meeting of the ARL, Chicago, Juny 6-7, 1951"),
e. The requesting library is required to name in the first application for a loan of microfilm the type of microfilm reading equipment it has available for use. Microfilm should be restricted to use in the building where suitable equipment and supervision are available for its use. The minimum unit of loan will be one reel, Not more than four reels should be requested at one time (See also ARL "Minutes, January 26, 1952," appendix E, p. 59.)

Microtext in the Management of Book Collections: A Symposium

THE FOLLOWING TWO PAPERS, prepared by anonymous writers, were presented at the Conference of Eastern College Librarians, Columbia University, November 29, 1952. Notes on the discussions which followed each paper are also included.

Microreproduction vs. the Regional Warehousing of Research Materials

It has been frequently pointed out that all of the various forms of microtext either eliminate entirely, or greatly reduce, at least three out of the four main costs which libraries incur in providing, for the use of scholars, their less-used research materials.

But, although microtext does save something on all of these three costs-namely purchase cost, binding cost, and storage costlibrarians have, so far, in considering their purchase of it, paid very little attention to anything except their saving in the first cost out of the three. Fremont Rider in his The Scholar and the Future of the Research Library prophesied that this viewpoint on microtext saving would continue to exist for some time to come, and that it would continue to exist despite two overwhelmingly important facts: first, that when one considers research materials as a whole, the cost of storage is far greater than the cost of purchase, and second, that microtext affects a saving in this storage cost which in some cases comes gratifyingly close to 99%.

A more recently published book by Rider, Compact Book Storage, went in to still more detail regarding this present lack of library interest in storage costs. It pointed out that the reason why so many librarians of research institutions are as yet relatively unaware of the staggeringly high cost of their book storage is that, in the extremely misleading forms of accounting which libraries are now following, book storage costs are almost entirely concealed costs. Most of them are factors of building cost, and library building cost, are not presented afresh each year in recurring annual budgets, but were long ago buried in capital investments of which conventional library budgetary accounting has not taken notice.

But still further to mislead both the librarians and the administrators of research institutions even those book storage costs which are current operating outlays also fail to appear in our library budgets. In setting up these budgets it is assumed that the cost of operating the building that houses the library has nothing whatever to do with the cost of operating the library. But, unless we know the interest, depreciation, and obsolescence upon our library building's stacks; unless we know what we are paying for the lighting and heat, the janitorial and elevator service, and the insurance on those stacks, we can have no idea of what it costs us to store our books. These items are all inescapable parts, and very large parts, of that cost. As a matter of fact the true cost of every one of a library's operations can today be arrived at only after a lengthy and difficult analysis of a great many other budgetary items which our conventional accounting now deems of little concern to the library.

In recent years, however, two important developments have forced the librarians of all research libraries, and also their executives and trustees, to become increasingly aware that all is not well on the book storage front. One of these two developments was the analytical material which appeared in the often quoted preliminary chapters of The Scholar, material which revealed for the first time that the rates of growth of all research libraries are of a geometrical rather than an arithmetical order. The other development has been the war and post-war inflations in the costs of building, which have mounted up at rates which have been equally disconcerting.

Of all the various "solutions" that have been advanced to exercise the "curse of in-

evitable growth" one of the most appealing has been what is known generally as "ware-house" or "regional library" storage. If we were to differentiate between these two phrases we would define "warehouse storage" as the segregation of a portion of some one library's less used books in a more cheaply constructed building situated in a more remote, and so a cheaper, location, and "regional library storage" as a cooperative effort by a number of libraries to effect the same result.

A "regional library" may, however, take one or the other of two quite different forms. It may be a cooperative "warehouse storage" center-i.e. a stack building cheaply built in a cheap location in which each library stores its own respective holdings intact. This is the type of cooperative storage exemplified by the New England Deposit Library. Or it may be a brand new, cooperatively set up and fully organized central library, in which each library's contributions are pooled into an integrated corpus, in which the identity of the constituent holdings is lost. This is the direction of growth being envisaged by the new Midwest Inter-Library Center at Chicago. The warehouse storage form of regional library has the advantage of eliminating the cost of checking, weeding out, re-cataloging, and recall-number-marking. It has the disadvantage of retaining the staggering costs of an enormous amount of duplication in the material being stored.

The advocates of regional libraries are forced to admit, however, that both of these regional library forms, like such other panaceas for growth as "weeding out" and "division of subject fields," are in reality "confessions of avoidance." In other words-so far as the constituent libraries are concernedwhat all of these so-called "solutions" do is to solve the library growth problem by ceasing to grow, i.e. by ceasing to have available in their own libraries the books that their patrons may want. "Weeding out" takes books away from the scholar completely; but the regional library and the storage warehouse library also take away his materials, perhaps not quite as completely but still to a place more or less distant.

The trouble with any sort of "taking away" is that research workers want their libraries to be not only as complete as possible; they want them also to give them as prompt service as possible. So recourse to a distant

regional library does not satisfy them. They want their materials, not a thousand miles away, or even a hundred miles away, but immediately at hand. On the other hand, if you will only give them the text of what they want, and will give it to them without delay, they are generally willing to compromise to some degree on almost every other aspect of library service.

We now come to the thesis of this morning's discussions, viz. that any librarian who makes his decision to buy a microtext solely on the basis of its saving in purchase cost alone is profoundly under-rating the possibilities for economy which microtext presents. But this under-rating is exactly what at present great many librarians are doing. It is true that they are aware that they save something on storage cost when they buy a microtext; but they look upon this storage saving as merely a byproduct of saving on purchase cost. To buy microtext in order to save storage cost as an end in itself, this is an idea that as yet hasn't really taken hold of the library profession. Or perhaps it would be more correct to say that it has begun to take hold so far as newspapers are concerned, but not as yet for books and periodicals. Yet it is vitally important for all librarians to realize-and to realize to the point of taking definite, immediate remedial action-that microtext effects far greater savings in storage cost than it effects in purchase cost, great as its savings in purchase cost usually are.

This categorical assertion can be made: when all library costs are taken into consideration, a microtext copy of a given book will always (or almost always) be cheaper than any book form text of the same book, no matter what that book text costs, no matter how it is cataloged and bound, no matter how or where it is stored. Furthermore this statement will still hold true, in almost all cases, even if the library already possesses the book in book form and so has to pay out nothing whatever to acquire it, or bind it, or catalog it. In other words, book storage cost alone is so extremely large a proportion of all book costs that, in the vast majority of cases, it alone outweighs all microtext costs,

But what this statement just made really says is this: that every research library would actually save money if it absolutely threw away almost all of the volumes now lying on its shelves—volumes which it has already bought, bound and cataloged, and would save money even if it had to pay out cold cash to acquire microtextual copies of them to replace them! This is the startling fact which most librarians are not yet really aware of.

Now for figures to back up this statement. All the cost figures here cited will be reduced to the same unit, which will be one average size book. An "average" size book will be here defined as an octavo one inch thick, i.e. a book of a size running about twenty-five volumes to a standard stack shelf (allowing, as usual a small portion of empty shelf for future growth). This average size book will be about five hundred pages long.

All cost accounting studies confirm the conclusion that to store a book today, in a conventional standard book stack, costs approximately sixteen cents per-year-per-volume. When, eighteen years ago, the results of the first cost analysis of book storage ever to be made were published, it was shown that, in the typical university library therein analyzed, it was costing it eight and one-half cents per-year-per-volume to store its books. The 88% rise which has occurred since, from the eight and one-half cents of 1934 to the sixteen cents of today, has been solely an inflationary one, there having been no change in the makeup of the constituent factors.

To be able to compare these per-annum book storage costs with microtext costs it is necessary to translate them into their capitalized form. Sixteen cents a year, at 5%, is the interest on \$3.20. In other words, to store an average size library book requires, today, directly or indirectly, a \$3.20 investment in book stack and book stack maintenance endowment. It is true that we may, if we choose, reduce this \$3.20 investment materially by substituting for conventional stack storage some form of so-called "compact storage." And it is also true that we may house our books in some sort of a "warehouse" type of storage, meaning one located on cheaper land and in stacks which are non-fireproof, or are crowded, or are only partially lighted, or are under-heated, or are in some other respects sub-standard. If we made our warehouse storage "sub-standard" in everyone of these respects, and if also we use "compact storage" in it, we might cut our book storage investment cost down from \$3.20 a volume to perhaps \$1.40 a volume. To this last figure we

would have to add certain costs that we would incur in the process of putting our unit volume into this combination of "compact" and "warehouse" storage. This transfer cost can be taken as somewhere in the neighborhood of thirty cents per average volume. We have then a range in book storage investment costs running down from conventional standard stack storage at \$3.20 a volume to compact warehouse stack storage at \$1.70 a volume.

Now let us analyze microtext costs on the same unit basis. The purchase cost of a microtext depends very largely on the size of the edition printed of it. In a ten copy edition our unit book might cost, in the case of the most expensive sort of microtext, as much as \$1.30 a copy. On the other hand, in a two hundred copy edition the cost could drop, in the case of the least expensive sort of microtext, to as little as 60 cents a copy. The average of these two costs is 85 cents a copy. To this average we have to add another 15 cents to cover the average cost, per volume, of catalog checking, and another 30 cents as the average capitalized cost, per volume, of microtext storage. This gives a total average cost, for our unit volume in microtext form of \$1.30.

The two totals of cost thus arrived at confirm the assertion originally made, namely that the total of all costs in the case of microtext, averages less than storage cost alone as in the case of the equivalent book. It will be noted furthermore that microtext cost is so low that even at its most expensive point it is very little more expensive than book storage is at its cheapest point.

Our analysis so far has been of costs in the abstract. Let us work out, for some one specific title, taken as a sample, the comparative costs of conventional "book" storage and the costs of what we might now call "microtext substitution storage." For this sample suppose we take a United States government document set, the hundred and twenty-eight volumes of what is known as the "Official Records of the War of the Rebellion." This is a title little used in most American libraries, yet it is one that is absolutely indispensable to any scholar who is doing work in the military history of the American Civil War. It is a thick volume set, and on the shelves it occupies thirty-five linear feet of shelf space.

Every one of the largest fifty research li-

braries in the United States is probably at present holding this set on its shelves. To carry it there is costing each one of these fifty libraries an annual storage cost (at 16 cents per "average volume") amounting to approximately \$40. An annual cost of \$40 a year, capitalized at 5%, means a capital storage investment of \$800 for each library. In other words, these fifty American libraries have, between them, frozen no less than \$40,000 of their capital funds merely to keep in storage on their shelves this one little-used set.

Now let us suppose that these fifty libraries said: "Let's get a microtext of this set and throw away our book form volumes of it." This means that the complete text of it would still remain, immediately at hand for scholars, in every one of these fifty libraries; but that the capitalized cost to each library of holding it—including the full purchase cost of it in microtext form—would be cut from approximately \$800 to approximately \$230.

But now let us consider another, and very important, factor. In our comparison up to this point we have in the choice of our variables always selected, not that variable which favored microtext, but that one which was most unfavorable to it.

Let us now assume a change in just one variable. Let us assume that, when we dispose of the book form book for which we substitute a microtext copy, we receive some "salvage" return on it. To be specific again, let us take as our example, not a set like the "Rebellion Records," which is so common that it would have little or no salvage value when we discarded it, but that instead, we take some set which, in its book form, does have some realizable re-sale value. Suppose, for example, that we buy a microtext set of a periodical which, bound and in good condition, has a re-sale, second-hand, value of \$2.00 a volume. (And \$2.00 a volume-i.e., a figure less than binding cost alone-is obviously not an extravagantly high salvage value to assume. Many periodical sets are worth \$5.00 and

Nevertheless, when we make just this reasonable change in just one variable, something little less than astonishing happens to our comparative cost picture. For we discover that, if we can secure even as little as \$2.00 a volume of salvage return on our discarded set in its book form, we have salvaged

enough out of it: (a) to pay the entire purchase cost of the microtext set which we are substituting for the book form set; (b) enough to set up a capital fund sufficient to finance the building of the space required to house this microtext set and to cover the maintenance of this space in perpetuity; and (c) enough to return to us, besides, an actual cash profit on the substitution.

If there was ever a case in library technology of having one's cake and eating it too this substitution of microtext books for salvageable book-form books would seem to be it!

Does this mean that a book should be thrown away before there is any assurance that a microtext copy can be secured to replace it? Does it mean that every microtext substitution can be made at a profit? Does it mean that every library should buy every microtext set that is offered to it, regardless of whether it already possesses the set in book form or not? The answer to these three questions is no. But what this analysis does say is this: that the primary criterion of purchase, in the case of every microtext, should be the amount of use which will be given the title involved. Few ordinary telephone users would want to substitute a microtext telephone book for its current book-form equivalent. But no library desiring to keep a file of discarded telephone books should want to keep them in book form if microtext copies of them are available. And this is the decision that ought to be made in the case of all research materials. We are all well aware that much used titles form a very small proportion indeed of the materials housed in most research libraries. And we should be aware that, for all little-used titles, microtext presents an adequate-and a very much cheaper-substitute.

And, it might be added, a cheaper one even when the cost of reading machines is taken into consideration. For reading machines for both microfilm and micropaper are already relatively cheap, and will get steadily cheaper as the demand for them grows and renders the mass production of them possible. They are already small and usable in ordinary daylight, so that they have now become a part of regular reading room desk or table facilities rather than special apparatus requiring separate accommodations. Furthermore it must be remembered that reading machines are a capital expense, meaning that, once a library is fully equipped with them, their continuing

\$10.00 a volume.)

annual expense is a relatively small item.

One argument that has been advanced against "microtext substitution" as a basic policy is that it is at present impossible to microduplicate some materials that are under copyright. This is true. All reputable microtext publishers are careful to protect such holders of copyright even though there is no reason why microtext re-publication should cause an original book publisher any loss. If book and periodical publishers were made familiar with the seriousness of the research librarian's storage problem, and if the full weight of the library profession were thrown behind microtext re-publication as a substitute for book storage, objections of copyright owners to the microtextual reprinting of at least all out of print materials would quickly disappear. The vast majority of warehouse storage materials are, however, out of copyright. New, live, saleable books simply do not go into warehouse storage.

So far we have been summarizing the arguments either for the substitution of a microtext copy for a book-form copy in the case of a single library, or for the substitution of microtext copies in a large number of libraries as against a non-integrated regional warehouse storage of all of the book copies of the same libraries. But a third situation is possible: what of a microtext in all of these libraries as compared with one book-form copy stored in an integrated regional library serving all of them?

From the standpoint of availability, or "stand by," cost alone the argument here is no longer in favor of microtext, for the cost of providing and storing one book-form text will certainly be less than the cost of providing and storing 50 microtexts in 50 libraries, no matter how cheap a form of microtext we may choose to use. On the other hand, when we come to regional library service, new operating costs crop up other than

those of providing and storing, costs which with a local library we have not had to take into account. One of the most important of these is the expense of the long distance lending of items; and this expense is important not only because it is large per loan but also because it has to be repeated without diminishment every time a loan is made.

It has always been axiomatic that interlibrary loans are expensive. As a matter of fact, they have always been so expensive that every reported cost accounting of them shows a higher average cost per-volume on a single loan than the entire cost to a local library of buying and storing under its own roof a microtext copy of the same item. We may grant that in the past interlibrary loan costs have been altogether too high. We may grant that they can and should be reduced by a proper regional library machinery.

But it is also obvious that, even if we commit ourselves ultimately wholly to the regional library concept we shall need—to give national coverage—more than one regional library, in fact we will need a number of them. And, once we go back to multiple copies of a text, the cost argument in favor of microtext again strengthens in its validity. Furthermore it is obvious that, if we substitute for a book any sort of flat microtext of it we are going to reduce our interlibrary lending cost a very great deal in packing and shipping.

Finally, however, we come back to our basic thesis: that, when we are considering regional warehouse storage versus microtext substitution storage, the cost argument, enormously important though it is, is not the whole argument, or even the main argument. The service afforded to one's library patrons by a text stored in one's own library is so definitely better a service than that afforded by a text stored in some geographically remote regional library that this betterment in service outweighs even the cost argument in importance.

DISCUSSION

James T. Babb (Yale): He observed that librarians will put off substitution of microtext until (1) the public is educated to it. (2) the space problem is more acute, (3) until cost accounting is compulsory for libraries. He said that Yale will subscribe to the \$600 microprint set of U. S. documents recently offered. He hopes that a cooperative

venture will replace document sets now on shelves with microtext.

The only storage program he favors is integrated storage, with loss of title and no accessions program. Yale is microfilming its newspapers and disposing of the originals.

He felt the need for the physical book to exist somewhere in the Northeast, but thought that need would decrease. He said that the microtext program should be developed. He put little stock in salvage value and thought costs of reading machines should have been brought out.

Microtext is adequate only if the book has no bibliographical value. The anonymous writer of the paper appears to be in a hurry. If his ideas are completely followed, there would be trouble. But librarians must hurry

up, or their trustees will.

Miles O. Price (Columbia): He said that he has long been a microtext enthusiast but he believes the microtext program cannot succeed until (a) material is available in that form and (b) available at a price which can be paid. He noted that discarding books costs money. To make prices really low, participation on a scale wider than just research libraries is necessary. Discarded material will have low salvage value because of the number of libraries which will be discarding.

Ralph Esterquest (Midwest Inter-Library Center): He was pleased that the paper called attention to the cost factors in supplying heat, light, and the amortization of storage. He objected to the implication that the microtext copy was always cheaper. Midwest Inter-Library Center has a capacity of 3 million volumes; the land value is \$80,000; the building—well-lighted, fire-proofed, air conditioned, humidity-controlled, well-furnished and landscaped—cost \$850,000, or a

total cost of \$930,000.

To move 3 million volumes from cooperating libraries, with adequate controls, will cost \$120,000. Thus, the total cost is \$1,050,-000. Converting these volumes to microfilm would cost \$15,000,000. Microcard costs would be higher. He referred to his November 1, 1952 Library Journal article written around the Bulletin of the National Association of Wool Manufacturers. The cost to store the set in Chicago was given as \$23.90; to microcard it the cost was \$793.90.

Keyes D. Metcalf (Harvard): He believes microfilm has almost solved the newspaper storage problem. A few years ago, newspapers took 10% of Harvard's shelf space. He considers the filming of early English books an important project. Microfilm is

being used for interlibrary loan.

The Official Records of the War of Rebellion can be stored in the New England Deposit Library for \$6.00 a year (actual cost \$3.60), including heat, light and service.

He thought the paper exaggerated the costs of cheap storage. His investigations have led him to believe the cost of micro-reproduction to be several times that mentioned in the paper. He said that not much material is now available in microreproduction—not even 100,000 volumes. What is of concern is a million volumes. Microreproduction is a publishing venture; it must sell on a standing order in advance to get a favorable price.

He saw no overnight solution, but hoped that each year more would be available.

Eugene Powers (University Microfilms):
Publishing costs can be kept down only if subscriptions are received in advance, he said.
The microtext program should concentrate on (1) deteriorating publications (2) current additions. He said that he was unwilling to reproduce publications, even when there are no legal barriers, if the original publishing body objects. Such was true with the publications of the Royal Society.

Cost of good reading machines is important. Most people do not like microtext. Make their reading easier with good machines to

minimize objections.

Cost of microtext is affected by reduction ratio; it requires greater craftsmanship as ratio increases.

Stanley West (Florida): He asked whether to buy in the original or microtext. The University of Florida faculty is not opposed to microtext.

Florida has newspapers on microfilm, but what about purchasing journals against the university's future growth. He has found bibliographies unsatisfactory on film, and wonders about journals. A faculty member said that the Congressional Record on film would not be satisfactory.

Speaker for Adelphi College: He reported that Beilstein on cards has proven satisfactory.

Mr. Babb: He noted that new reading machines would make Congressional Record easy to read.

Flora Belle Ludington (Mount Holyoke): She said that young instructors need to study locally, and a college has to face the pressure for research materials.

Early English books on microfilm was the first cooperative purchase of Mount Holyoke, Smith and Amherst. She believed that current material for research can be in microtext in a college, but the scholar sometimes needs to see the physical book.

in teaching the use of the machine. Misfil-

She wonders what the cost is, in staff time, to help the user locate microtext and

ing is costly; it is sometimes cheaper to replace.

Phillips Temple (Georgetown): The Chemistry Department turned down the microtext of Beilstein. Microtext prevents two using the set at once and prevents home loans.

Mr. Metcalf: He referred to the Carnegie Corporation supported study on what is un-

satisfactory in microtext.

Robert F. Beach (Union Theological Seminary): He told of a cooperative project in filming a journal. To one subscriber, the cost would have been \$400; when 15 subscribed, it was reduced to \$100. He asked whether individual institutions should sponsor such programs or whether they should be centralized.

Charles W. David (Pennsylvania): He was

prepared to discard his extensive set of the British Sessional Papers in favor of microprint but encountered strong objections.

His response to the anonymous paper was "emotional." He found the economic analysis "exasperating." He questioned its soundness. The paper said to him, that research librarians are a "bunch of boobs," because they have not accepted microtext as a "tidal wave."

He said it is an "invitation to librarians to destroy books by the millions."

He said you cannot give library service "without money," and you cannot "run a great library cheaply."

The paper over-simplifies the problems, he said. It is costly and laborious to discard.

Verner W. Clapp (Library of Congress): The real issue is not between microtext close at hand, and physical book at a distance. Microtext gives us publications we could not otherwise have, or it replaces deteriorating material.

Correlation of Forms of Microtext for Library Use

I NSTEAD OF A MORE OR LESS enthusiastic advocacy of microcards, or microfilm or microprint or any other one form of microtext it would seem that there is called for at this time a study of certain of the over-all problems of microreproduction.

There exist at present two basically different forms of microtext: one transparent (i.e. microfilm), one opaque (i.e. micropaper). Each of these two forms again splits itself into two; microfilm dividing by its form (i.e. reels or flat sheets), micropaper dividing by the method used in its production (i.e. photographically printed or photo-mechanically

printed).

To make the general acceptance of microtext by libraries even more difficult each of these four basic forms is being issued (or presently proposed) in a large number of different shapes, sizes, and page arrangements. Reel microfilm is being made in four different varieties (in two different widths, and, in the case of each width, with the text photographed either at right angles to, or parallel to, the flow of the film.) No sheet microfilm is yet being commercially produced in the United States; but it is understood that two

important sources are preparing to issue some soon, and that at least one will be in the standard international catalog card size, $7\frac{1}{2} \times 12\frac{1}{2}$ cm. Sheet microfilm is being issued (or projected) in Europe by several publishers: in the standard catalog card size, and also in four other sizes, $7\frac{1}{2} \times 15$ cm., 9×12 cm., $10\frac{1}{2} \times 15$ cm., and 13×18 cm. In this country there is also being discussed a still larger sheet film size. There are also several attempts being made to secure for reel film the advantages of flat storage by inserting strips, or single frames, of reel film in "windows" cut into cards.

When we come to micropaper there is a similar variety of forms. The specialized form of micropaper known as microcards has, thanks to the "Code" governing their production, been so far kept standardized. Micropaper in other than microcard form is at present being produced in this country in the one size only viz. 6" × 9", and in Europe in the one size only, viz. 10½ × 15½ cm. The American product is photomechanically printed, the European one photographically printed. Other projects are being projected, however, either here or abroad, involving at

least two other sizes, one $5'' \times 8''$, one approximately $4\frac{1}{3}'' \times 7''$. These various micropapers are also not standardized as to page arrangement.

To sum up: We, as librarians, are faced already with at least fourteen different, and completely uncorrelated, forms or sizes of microtext; by "uncorrelated" meaning forms that cannot be interfiled with each other, and that cannot be read except by a specially designed, or a specially adapted, reading machine of their own.

This utter lack of correlation would, one may submit, become an extremely serious matter if librarians were to accept it. But one says "if" because it is seriously to be doubted that they are going to accept it. It is very unlikely indeed that we are going to buy microtextual materials requiring storage in a dozen different kinds and sizes of containers, maintained in a dozen independent filing arrangements, and requiring for their reading a dozen entirely different types or models of reading machines. Such a burden of unstandardization would be impossible from the standpoint of both use and cost. We believe that what we as librarians want is that form of microtext-or those forms, if more than one form is absolutely necessary-which will most economically, and most effectively, solve all four of the library's great cost problems: purchase. storage, cataloging, and binding. If it should appear that any one form of microtext furnishes a complete answer to all four of these problems, then we are going to want that one form-and no other. If two or three forms of microtext appear to have a proportionate function to perform in meeting the library's problems then we are going to want those two or three forms-and no more.

Some of those best acquainted with microtext believe that it is possible to correlate all its present multiplicity of forms into one single integrated pattern eliminating all waste and duplication. And, because they believe that the above listed dozen or more forms and sizes of microtext can be brought into such a single correlated, and functionally complementative, whole, it seems to them that the encouragement of this integration is one of the most important duties at present facing us as librarians. The amount of correlation which they deem essential is such as will:

1. Make it possible to read all the various forms of microtext required for library use

on one single reading machine; and

 Make it possible to interfile all these forms in one single type of storage container and in one single filing arrangement.

This problem of standardizing microtext form and size is in no sense an unprecedented one. Seventy-five years ago Melvil Dewey faced one exactly similar. The library world at that time had in use scores of different sizes of catalog cards. In fact almost every library had a size of its own. To eliminate this intolerable hodge-podge of catalog card sizes Dewey proposed his 71 × 121 cm, "international" size. His fight against this particular chaos was not won overnight; it was a long and bitter one. It went on for years. But eventually he did win it; and his 7½ × 12½ cm. card is now accepted as "standard" in every country in the world. It has become far more than merely a catalog card; it is the most widely accepted, and most characteristic, library tool: the symbol of bibliographical efficiency. Billions of cards of this size are in use: millions of dollars' worth of filing equipment has been built and bought to house them. Furthermore such profoundly practical library services as the great card distribution system of the Library of Congress would have been impossible except for this one very simple bit of standardization. No one in the library world would today dream of going back to catalog card chaos. Today, with microtext, we face exactly the same sort of chaotic variation that Dewey faced 75 years ago, and may. from a standardization of it to some one single interfileable format and size, realize the same sort of benefits. Only our benefits will be enormously greater, because the wastes resulting from a continued lack of microtextual correlation would be enormously greater.

In the solution of the first half of this problem we are fortunate, for it is optically possible to read all types of microtext on one type of reading machine. It is impossible to read micropaper with a microfilm reader. But, simply by placing microfilm against a white paper background, it is possible to read it and to read it adequately well—with any good micropaper reader. Note that the phrase here used is "adequately well." It would be absurd to claim that a micropaper reader can project a screen image of a microfilm text as bright and as clear as that which a good microfilm reader projects. It does remain true, however, that for the small library, and for individuals and other microtext users desirous of making one reader suffice for all types of text, a' single micropaper reader can be made to do and it is further true that, provided standardization on size can be arrived at, it is possible to devise two readers—and with no necessity for more than two—that will read all sorts of microtext perfectly well—one for microfilm, and one for micropaper.

To the remark above that all existing microtexts media would seem to have a place in the integrated synthesis that we are discussing one exception will have to be made. One of the chief advocates of microtext remarked seven years ago that-for library use-microfilm in its reel form is an outmoded anachronism. He said that it would appear that sheet film can do all that roll film can do, and do it better. Better, because sheet microfilm possesses many of the advantages that micropaper has, namely greater compactness in storage, greater convenience in handling and use, greater opportunity for a proper catalog entry, greater interfilability, etc., etc. Europe years ago came to this conclusion, and there sheet film is already being widely produced. So, although microfilm, in some form, is likely to be a continuing necessity, one sees it-so far as library use is concerned-in sheet film form rather than in roll film form.

The "situations" in which—as the physician would put it—microfilm is "indicated," in fact the relative places of all forms of microtext in the over-all picture, are going to be determined, it would appear, primarily by size of edition, simply because microtext purchase cost depends primarily upon the number of copies printed of a given item; and this even though, in some cases, other factors than purchase cost may be controlling.

The primary fact is as Miles Price, of Columbia University Law Library, once put it in a dictum frequently quoted since: "Microcards are a method of publishing, microfilm a method of copying." If we add to his statement this supplementary one: photographically printed micropaper is the cheaper method of manufacture for small edition publishing; mechanically printed micropaper the cheaper method for large edition publishing; we have roughly determined the respective fields of each of these three forms.

These terms "photographically printed" and "mechanically printed" are, of course, as they are here used, not precise. Whatever form the final result may take, every sort of microtext has to start with the photographing of an original text. It is from this point that their techniques diverge. "Photographically printed" micropaper is one done on sensitized paper from a negative film. "Mechanically printed" micropaper is done on un-sensitized paper by chemical-mechanical means. Any size of micropaper can, of course, be made by either process, depending on the size of the edition, the kind and amount of illustration material to be reproduced, and to some degree on other factors.

These preliminaries leave us face to face with the one great correlational hurdle remaining, namely: the lack of uniformity which exists at present in the sizes of our various microtext media. Whether one deems this hurdle a serious one or not depends on one's viewpoint. Not a single one of the present manufacturers of microtext was ever a librarian, and some of them have little or no knowledge of the librarian's problems. As a matter of fact the sizes which these manufacturers chose for their products were often the result of sheer accident, while in other cases they were based on mathematical or commercial or typographical considerations which have little or no bibliothecal validity.

With such size origins as these it might seem that the securing of a general uniformity in microtext size for library use would not be a difficult matter to bring about. But, regardless of how these various sizes happened to originate, vested interests in them, both financial and psychological, have now been developed. And the longer these interests continue to grow the more difficult it will be for us librarians to secure that uniformity in size which it is so fundamentally essential that we have. There is, however, one basic fact very much in our favor. There exists no technological obstacle of any sort whatever to prevent a complete standardization of size for all forms of microtext. In other words the objections we face are all man-made ones, and so easily correctable ones.

Let us run over the existing size situation again, translating all the sizes into their approximate equivalents in inches, to make for easy comparison. Sheet microfilm is at present being produced (or planned) in the following sizes: $3'' \times 5''$, $3'' \times 5^{1}'' \times 3^{1}'' \times 4^{1}'' \times 4^{1}'' \times 5^{1}'' \times 5^{1}'' \times 7''$, and in one unspecified size larger. Micropaper is at present being

produced (or planned) in the following sizes: $3'' \times 5''$, $41'' \times 51''$, $41'' \times 7''$, $5'' \times 8''$, and $6'' \times 9''$.

It will be noted that, of the eight sizes above listed, five are bastard sizes from a filing equipment standpoint (i.e. they fit into none of the regularly manufactured sizes of filing equipment) while three do fit into some standard equipment size. It will also be noted that, of the two overwhelmingly most common

sizes of filing equipment (namely $3'' \times 5''$ and $81'' \times 11''$), there exists microtext to fit only the first of the two.

Inasmuch as this statement attempts only a general presentation of the specific problem it discusses it will not present any arguments for or against any specific size. All that it argues for here is the desirability of seeking for library use some one definite standard size.

Discussion

Verner W. Clapp (Library of Congress):
The whole matter of standardization in every matter of life is confusing. It is difficult to debate and difficult to establish an authority.
The Department of Commerce and the American Standards Association work on standards for industry. Library standards have been developed within library groups; now we are in a technological area.

Microfilm standards are derived largely from the motion picture industry. Committee Z 39 of the American Standards Association (of which Mr. Clapp is chairman), has raised questions of the problem of microtext standardization. Meanwhile, there is a strong development in Europe for standardization under the jurisdiction of the International Standards Organization; the U. S. affiliate of this organization is the American Standards Association.

The French are endeavoring to take the lead in microcopy standardization. A lot of work has been done on film strip and other microtext forms. The chairman of the Subcommittee on Photo Copies is French. Two meetings have been held, one in Paris, and a second recently, in Copenhagen. The Europeans, instead of cutting down on the number of sizes, are increasing them.

The ALA's Committee on Microcopying has not hitherto been effective; it does not seem to have had the necessary jurisdiction to get standards established. The library associations should work with the American Standards Association in order to reach agreements. Committee Z 39 might issue bulletins to communicate information on microtextual subjects.

Douglas Bryant (Harvard): He reported on the Copenhagen meeting. He said that Europeans are waiting to hear what we want and need. We can best communicate with them through Z 39. The next meeting of the Europeans will take place in Paris in January; a Z 39 representative will be there. The subject will be standards for microfilm reading machines.

Mr. Clapp: The machine should follow cards; not cards the machine. For up to 50 pages, he prefers 3 × 5; other sizes he favors are 6 × 9 and 8½ × 11. All of these are based on existing filing equipment and the convenience which such equipment represents. The larger sizes, he believes, are best for long runs of newspapers.

Mr. West: He questioned: Could one machine handle three sizes? He thinks librarians should encourage the development of a single machine.

Mr. Powers: A machine is being made which will take all sizes of opaque microtext. He thinks two machines, maybe three, are necessary: (1) for opaque, (2) roll film, (3) sheet film. One cannot expect a multipurpose machine to take all.

Mr. Clapp: He knows of plans for one.
Mr. Powers: He believed it would be very

expensive.

Albert C. Boni (Readex Microprint): The smaller the opaque card which has to be moved, the cheaper the machine can be. A machine for an 8½ × 11 card would be expensive. He believed it is too early to set standards, and doubts whether one machine for both transparent or opaque is ever successful. He said firms are working on equipment to determine how best to serve readers.

Margaret Johnson (Smith): She said that a really good reader is not available yet. Patrons need to be considered, she stated. A better reader would reduce faculty resistance. She had no objection to three good readers.

Mr. Metcalf: He had proposed 17 years ago that standardization be effected. He was

pleased his advice had not been taken. He wonders if it is yet time for standardization. When it is time, we do not want to fail to get standards, he stated. Our talking should be about standardizing reproduction, not machines, he added.

Donald Cameron (Rutgers): The more machines Rutgers has, the more expensive they become. As improvements arise, and new machines are purchased, he has tried without success to turn his old ones in. He believes that the time is too early for standardization.

Mr. Clapp: He agreed that machines are bad. He points out that the subject under discussion is standardization of materials sizes. The standardization of film, as we have it, is owed to the film industry, and because of that standardization, it is possible to order usable film from Greece, for instance.

Today's talk is not about film, but "flats," transparencies and non-transparencies. Powers can produce flat film.

We should express preferences for one or more sizes. He thinks these preferences depend upon the filming equipment we have.

Mr. Powers: He observed that roll, card and flat each has a place. It depends upon what it is for. He thinks sheets costly. He has no reader, except an experimental one, for flat prints. He can work on rolls more cheaply.

Mr. Boni: He suggested that sizes should be expressed in inches.

Ermine Stone (Sarah Lawrence): She asked if FID had done anything for standardization.

Mr. Clapp: He said that the International Standards Organization is the standardization agency for Europe.

Morris Gelfand (Queens): He believes that a study is required. He does not favor too specific recommendations now. He wonders if the group present is the one to speak.

Mr. Clapp: This body, having been consulted as to its preference of the 8 sizes, can transmit to the American Standards Association its opinion as an expression of preference.

Charles F. Gosnell (New York State Library): He observed that the sizes Mr. Clapp suggested are good.

Mr. West: He believed that if we want anything done, we should tell the ASA.

Fremont Rider (Wesleyan): He agreed with the anonymous writer that we should favor standardization, but he did not believe that it is the time for regulation of sizes. He thought the three sizes mentioned are far enough to go.

Proposed Statement on Microfilm

(Continued from page 291)

film material in its own collections, manuscript and rare printed materials available on film should not be reproduced by one library for another without permission of the library owning the original materials.

Microfilming Clearing House

There has been established in the Union Catalog Division of the Library of Congress a Microfilming Clearing House, the purpose of which is to provide a central source of information on extensive microfilming projects planned, in progress, or completed. Much of the material here assembled is disseminated in the Microfilming Clearing House Bulletin which is published at irregular intervals as an appendix to the Library of Congress Information Bulletin. The quality and value of this service will depend on the cooperation of all who undertake extensive microfilming projects. Therefore, to prevent unnecessary duplication of effort, all institutions are urged to report their current and completed projects on the printed cards provided by the Library of Congress and to make inquiries before starting new projects.

General Program of the Committee on Documentary Reproduction, American Historical Association

Dr. Erickson, University of Illinois, is chairman of the Committee on Documentary Reproduction. American Historical Associa-

THIS IS THE BROAD OUTLINE of the program on which the committee has been working during the past few years. The Committee on Documentary Reproduction was created in 1946 as a special committee of the Committee on Historical Source Materials, the latter under the chairmanship of Dr. Herbert A. Kellar. Upon the discontinuance of the parent committee in 1947, the Committee on Documentary Reproduction became a basic committee of the Association and has functioned since in that status.

The major objectives of the committee are (1) to utilize the established technical media of documentary reproduction to make scarce, costly, and generally inaccessible basic source materials available to scholars; and (2) to whip the frightful difficulty of getting manuscripts published by promoting a program of low-cost microprint publication, together with a broad distribution of the microprinted edi-

Within the scope of basic source materials are included national and state legislative, executive, and judicial materials, newspapers and periodicals, and miscellaneous selected documentary materials, both official and nonofficial in character. In other words types of sources that serve the needs of the greatest number of scholars.

Source materials are being made available to scholars as a result of four different but closely related operations: (a) By a program of republication in microprint of printed basic sources: (b) By utilizing Fulbright research scholars to obtain microfilm copies of selected foreign manuscript materials; (c) By depositing the master negatives of these materials in the Library of Congress for use either there or through interlibrary loan or for the purchase in positive microfilm duplication by other libraries, when this practice is not ruled out by the holders of the original manuscripts; and (d) By publishing the results of the above operations so that scholars will know about the sources acquired.

With these general objectives and the operations by which these objectives are being achieved in mind, let us next consider further

With respect to the microprint republication program the committee is placing sources within the immediate reach of scholars by making it possible for libraries to purchase low-cost microcopies of basic printed documentary collections. At the outset the committee decided that the process employed in large scale republication must meet the following essentials: the microcopies must fulfill the requirements of permanent records, i.e. they must have a permanence of 300 years or more; they must be low in cost; and they must be easy for the researcher to use and for the library to store. In our opinion microprint, produced by the Readex Microprint Corporation of Chester, Vermont, best meets all of these qualifications. Microprint is a printing press operation in which 100 pages of text, arranged in a uniform decimal pattern, are printed in carbon printers' ink on 9 by 6 inch cards that possess the properties of per-

¹ This paper was read before the session, "The Microfim Program," December 29, 1952 at the Annual Meeting of the American Historical Association in the Mayflower Hotel, Washington, D.C.

The members of the Committee on Documentary Reproduction of The American Historical Association are: Austin P. Evans, Columbia University; C. W. de Kiewiet, University of Rochester; J. Harry Bennett, University of Texas; Lawrence A. Harper, University of California; C. Easton Rothwell, Hoover Institute and Library; Richard W. Hale, Jr., Wellesley College; Loren C. MacKinney, University of North Carolina; Warner F. Woodring, Ohio State University; and Edgar L. Erickson, University of Illinois, chairman.

manent record paper as specified by the National Bureau of Standards. Because of the economy of a printing press operation microprints are produced at a considerably lower cost than other forms of microreproduction. Because of the decimal arrangement of text pages on the card, a reader can insert a card in the projector and locate a given page in a matter of twenty seconds; and because the fundamental qualities of microprint are the same as those of books, the cases in which the cards are issued may be stored on ordinary library shelves under the same temperature and humidity conditions as books.

Microprint marks a veritable revolution in printing. The process resulted from 20 years of research and experimentation, with the usual burdensome expense and heartbreaking series of failures and partial successes before the final goal was reached. The man who perfected this process that will mean so much to the historian and to the public at large is Albert Boni, publisher, of New York. Twenty years ago he gave up his regular publishing business and devoted his time to the development of microprinting. Think of the problems he encountered in fashioning a printing plate for text pages reduced 300 times that would print a microcopy as sharp in definition as that of microfilm; and think of the problems of ink control and technical adjustments of the printing press that he had to solve for the successful use of that plate. Mr. Boni deserves a place in history along with the other great inventors. His achievement is a personal one; it has not been the product of a subsidized research laboratory. And what is more the motivating force behind his long years of research was his desire to bring literature of mankind within the reach of people in their own homes. Never have I met a more genuinely philanthropic person, and as chairman of a committee that is utilizing the process that Mr. Boni developed to reprint significant historical collections, I must publicly acknowledge the debt that historians of the future will owe to him.

The committee has sponsored one large microprint republication project and has others under consideration. The microprinting of the British House of Commons Sessional Papers for the 19th century is now reaching its final stages. This project involves about 6000 volumes of approximately 4,000,000 pages. The collection is composed of upwards of 80,000

separate papers bound in annual sessional series, and republication involves heavy preparatory work of collating to establish a complete set of the papers and a complete text of the individual papers, and of editing to insure an intelligible arrangement of the papers within the microprint decimal pattern; and republication also involves final proofing of the entire collection to insure against illegibility and errata that arise from slips in the editing, the photographing, and in the composition of plates. Aside from significant financial aid by the University of Illinois in the proofing of the microprint edition, the project has been entirely self-sustaining through sales to libraries. Prepublication subscribers are obtaining the 100 years of volumes for about \$5000 or about \$.75 a volume. Single volumes of the original papers have retailed for about \$5.00 a volume when they could be found; and the committee estimated that a microfilm edition of the collection would have cost at least \$25,000.2 The microprint edition will probably be the only complete collection in existence of the papers listed in the official composite indexes for the century.

If the demand warrants, the early sessional papers and those for the 20th century will be microprinted; as also will the parliamentary Journals and the parliamentary Debates.

The committee is also sponsoring a project to microprint a large collection of carefully selected Russian materials that was compiled by Professor F. S. Rodkey of the University of Illinois in consultation with a large number of other scholars in Russian history. The project must have 50 subscribers if it is to be executed. Within the past two weeks letters have been sent to nearly 200 libraries inviting participation, and we are now awaiting the results of this canvass. The priority list was compiled with the view to keeping the cost within a \$1000 limit. To give some idea of the values that subscribers would receive for their money in these choice Russian sources I can state that one title alone in the 27 on the select list is quoted for sale at \$160. Professor Rodkey is the editor in charge of the project, and he has with him here at the meeting extra priority lists for persons interested in seeing them. The committee also invites your support back

⁸ This estimated cost in microfilm includes the collation and editing costs that total over \$60,000, and that are being paid by the Readex Microprint Corporation. It does not include, however, the cost of final proofing which will amount to about \$17,000 before it is completed.

on your campuses in helping to enrol your respective libraries as active participants in the project.

Professor Austin P. Evans of Columbia University is endeavoring to do something about the microprint republication of "Out of Print Books" in the medieval field.

The Readex Microprint Corporation and the Government Printing Office have announced a project to microprint the 12,000 non-depository U. S. government documents that are published yearly but that are not included in the documents of the depository collection that is distributed to libraries. In the non-depository list are the publications of the Atomic Energy Commission, the Federal Trade Commission, and a host of other important agencies. It is my belief that in the matter of a few years nearly all government publications will be circulated to libraries in microprint only. This change would effect a savings of millions annually to the government in printing costs and to the libraries in space saving and cataloging costs. The committee is proud to know that by its pioneer operations with the Sessional Papers a vast new frontier has been opened in the field of government publications. Likewise we are glad to note that our colleagues in English are following the lead of historians and are microprinting all plays published in English prior to

Microprint also lends itself to the field of original publication. This can best be initiated in the field of thesis publicaton. For \$100 a student could have his thesis microprinted and circulated without further cost to 200 libraries. The steps necessary to establish this mode of original publication are quite simple: Graduate colleges should first recognize microprint publication as a legitimate form of publication. Once this recognition is gained, publication of non-thesis studies would soon gain general acceptance. The Readex Company could help the cause by producing a lowcost projector that could be placed in a living room or study as an article of furniture and by issuing a library of choice literature that would appeal to the average person. Mounted on a portable base and an adjustable arm such a projector could be rolled into place before the reader lounging in his favorite chair and used with the comfort required for leisure reading. For a cost that would make the present drug store editions of literature seem

expensive, a huge library of microprint editions could be made available to the average home.

Next let us turn to the phase of the committee's program that is based on the utilizing of Fulbright research scholarships for obtaining research materials in foreign archives. This phase of the committee's program is especially being considered in this session.

Our activity apropos of the Fulbright program started in 1947 when the Fulbright Board was formulating policy with respect to its educational program. At that time with encouragement from both Senator Fulbright and the Department of State, the committee made an all-out effort to get an annual assignment of Fulbright funds from each of the 28 countries involved, that could be used to obtain microcopies of selected basic source materials. In our proposal to the Fulbright Board we emphasized that the assignment of a percentage of funds for microcopies of foreign documents would benefit a far greater number of American scholars than would the expenditure of similar amounts for sending scholars abroad. We believed that a liberal interpretation of the Act would justify the use of a part of the funds for microcopying activities, and that with funds so assigned we could undertake large-scale microcopying projects abroad. Our proposal was supported by our Association and its Pacific Coast Branch, the Mississippi Valley Historical Association, the Library of Congress, the American Political Science Association, the American Sociological Society, the Committee on Renaissance Studies of the American Council of Learned Societies, the Association of Research Libraries and the American Economic Association. In the final determination of policy, however, the Fulbright Board went only part way in granting the committee's requests. They provided for research scholarships as part of the Fulbright educational program, and made scholars with applications embracing microfilming projects, indorsed by the committee on the Library of Congress, eligible for research scholarships. While this was only a half-success, the research scholarships together with assistance from the Library of Congress have made it possible for us to carry out limited microcopying activities abroad. We do not believe that the considerable missionary work of the committee in getting research scholarships included in the Fulbright program is generally

appreciated by the many recipients of these awards.

Since the allowance for technical expenses to a Fulbright research scholar is limited to \$500, and even that amount is not always forthcoming, the microcopying activities of the scholars who have participated in our program have been governed largely by the types of materials that the Library of Congress was in a position to purchase from its limited funds. These materials fall into three categories: catalogs and inventories of manuscript collections, legal materials, and documents related to American history. Nearly all of the projects that have been jointly sponsored by the committee and the Library of Congress have been based on one or the other of these categories. In all cases, however, the microfilms obtained will be of value to historians, and the committee wishes to thank the Library of Congress for its splendid cooperation. What has been accomplished thus far is only a sample of the manner in which the historian can be of assistance to the library and the library to the historian.

Without stealing the ammunition of the speakers that follow me, I must say a few words about the various country programs. At the outset special committees were established for each of the Fulbright countries. The committees are to be found in the Annual Proceedings of the Association for 1947. Some of these committees have done very excellent work and have achieved positive results; others have been defeated by circumstances in specific foreign countries that were beyond their control; and some have not succeeded in shaking off the inertia of lassitude.

Two committees in particular prepared remarkable programs that were strangled by the ever-grasping tentacles of communism. That for Finland prepared by Professor John I. Kolehmainen, Heidelberg College, had to be suspended because Finland has never implemented the Fulbright program. It may be that conditions will soon permit something to be done to repay Professor Kolehmainen for the commendable plans that he made for microfilming Finnish sources. Similarly a well-conceived program for China that was framed by Dr. Arthur W. Hummel, Division of Orientalia, Library of Congress, had to be

shelved, and I can see no hope for its resumption in the unpredictable future.

On the other hand, active programs are in progress for France, Italy, Greece, Austria and the Philippines. While I shall leave comment on the first three of these countries to the other speakers, I do want to commend Professor Richard W. Hale, Jr., Professor Loren C. MacKinney, and Professor Peter Topping for the initiative and good judgment they have shown in developing their respective countries. In the case of Austria developments are proceeding in both the medieval and modern fields. Professor George B. Fowler, University of Pittsburgh, spent the year 1951-52 in Austria where with financial aid from the American Philosophical Society he microfilmed a large number of unpublished catalogs and inventories of medieval collections of several of the forty-odd Austrian monasteries. This work we hope to continue in subsequent operations under Professor Fowler's direction. Professor Ralph H. Lutz of Stanford University has cleared the way for the microfilming of Austrian national and provincial archival materials, and we hope that a suitable candidate can be found for initiating work in this field during the coming year.

Edgar B. Wickberg of the University of California is now in the Philippines where he is surveying the archival records with the view to preparing a microfilming project embracing materials within the categories that are desired by the Library of Congress.

As we are able to get funds that can be utilized for microcopying operations, additional country programs will be opened. As I see it the best solution to the matter of funds would be for the research libraries to contribute a small percentage of their annual book budgets to a common fund that could be expended for selected basic source materials in foreign archives. By their contributions libraries would purchase a loan service from the Library of Congress acting in the capacity of a central depository for the acquired foreign documents. A few years ago the committee and the Library of Congress submitted just such a proposal to the Research Libraries but as yet they have not taken final action on it.

Time does not permit me to expand on the matter of interlibrary loan of materials in microform, and on the publication of the re-

(Continued on page 316)

See "Committee on Documentary Reproduction," Annual Report of the American Historical Association for the Year 1947, Vol. I, Proceedings, pp. 57-64.

Microfilm in University Libraries: A Report

In 1950-51, the ALA Serials Committee selected as one of its projects "the evaluation of the acceptance of microfilm by the clientele of public, college, university and research libraries." To conduct the survey a subcommittee of three was appointed, and as each of the members had two-year tenure on the Committee, the work was to be accomplished

in that period of time.

By a later decision, the survey was limited to just college and university libraries but the scope was broadened to include other pertinent information on microfilm in university libraries. Data gathered covered such topics as the extent and type of the microfilm holdings, the reading machines, the physical facilities, the use of the film, patron reaction to microfilm, purchasing policies, current subscriptions on microfilm, binding vs. microfilms for storage, and the effect of clientele opinion of film as a factor in its acquisition. Consideration was given also to including other forms of microreproduction but the vote was to limit the survey just to microfilm.

The ninety-four institutions chosen for the survey include most of the large graduate schools, the libraries with good financial support, and those with high enrollments. Rapidly growing young colleges as Wayne, Houston, the University of Miami, and Brooklyn College, but whose libraries are comparatively small, were also included. Although all types of colleges were chosen and from all sections of the nation, the three main factors for inclusion were nature of graduate program, enrolment which generally exceeded 5000 students, and geographical distribution. We wished to have data from not less than 70

As nine librarians did not reply to our questionnaire, two others failed to furnish the data as promised, three submitted negative reports because of meager holdings and equipment, one sent a return too incomplete for use, and one was unwilling to cooperate, the data for the survey have come from 76 college or university libraries.

The combined microfilm holdings of reporting libraries totaled 164,571 reels. Participating libraries were requested to equate the number of reels to 100 feet, and generally the figure reported represented reels of that length. Of the six categories or types of materials on film, by far the greatest number of reels was of newspapers, the combined holdings being 98,612. The other materials in order were 16,934 reels of books, 10,066 of manuscripts, 10,053 of periodicals, 6,977 of documents with more than one third of the total reported by one library, 1,762 of separates, and 21,047 reels undivided by type of material.

Because the number of reels of microfilm in the libraries reporting vary from 3 to 20,000, no median has been established, but in Table I is a broad breakdown of the microfilm resources according to number of reels for the various types of publications in li-Dividing the libraries into two braries. groups, those with 1000 or more reels and those with less than 1000, we find the former to be 43 as against 33 for the latter; however, further division by thousands shows 20 libraries with 1000-1999 reels, 5 with 2000-2999, 7 in the 3000's, 6 in the 4000's, 1 each in the 5000's and 6000's, and 2 with 10,000 or more. Thus, the number of reels common to the highest number of libraries is less than 1000

Table II lists by type of resource the 43 college and university libraries whose microfilm holdings number 1000 or more reels. There is, of course, no magic in the number 1000, but it is a good point of departure.

Libraries reporting holdings of fewer than

This report was submitted June 17, 1952, to the ALA Serials Committee by Subcommittee C. Mr. Harkins is chairman of the Subcommittee.

1000 reels were Alabama Polytechnic, Arizona, Boston University, Brooklyn College, Cincinnati, Cornell, Connecticut, Dartmouth, Denver, Fordham, Georgia Tech., Georgia, Houston, Idaho, Iowa State, Joint University, Kansas State, Maryland, University of Miami, Michigan State, Mississippi State, Mississippi, Montana State, City College of New York, Oregon State, Oregon, Pennsylvania State, Rice, St. Louis University, Southern Methodist, Syracuse, Texas A & M, Virginia Polytechnic, Western Reserve, and Wyoming. The following institutions either furnished no report or failed to list holdings where a return was made: Baylor, Louisville, Massachusetts Institute of Technology, Nebraska, New York University, North Carolina State, Northwestern, Oklahoma A & M, Oklahoma, Purdue, Tulane, Washington State, and West Virginia.

Analyzing the reports from seventy libraries on their reels of newspapers, it is seen that the greatest number, 46, have fewer than 1000 reels, 21 have from 1000-4999, and only 3 have more than 5000. Of the 46 reporting below 1000 reels, the highest concentration is less than 600 reels, the division being 8 in the 400's, 7 with fewer than 100, 6 having 200-299 reels, 5 each in the 500's and 100's, and 4 libraries having from 300 to 399 reels, or a

total of 39.

Libraries with a rather high number of newspapers on film but not listed by name because the total holdings fell below 1000 reels are the following: Arizona 600, Brooklyn 772, Cornell 330, Dartmouth 266, Fordham 291, Georgia Tech. 448, Georgia 443, Iowa State 562, Miami 408, Mississippi State 230, City College of New York 223, Oregon State 816, Oregon 429, Pennsylvania State 516, Southern Methodist 300, Virginia Polytechnic 200, Western Reserve 447, and Wyoming 589.

The concentration of periodicals on film is below 250 reels, 42 of 54 libraries which reported indicating holdings in that number. Tabulated in 100's, the division is 22 libraries with fewer than 100 reels, 11 with from 100 to 199, the same number for 200's, 3 in the 300's, 4 in the 400's, 2 in the 500's and 1 library with more than 500, the count for it being 1200. Institutions omitted from the table above but whose microfilm periodicals holdings number 100 reels or more are: Alabama Polytechnic 178, Georgia 170, Maryland

239, Miami 239, City College of New York 210. Southern Methodist 100, Western Reserve 199, and Wyoming 140.

For books, manuscripts, documents, and separates, the concentration of holdings in each is fewer than 100 reels.

Books numbering 100 or more reels in libraries not listed above are: Cornell 270, Michigan State 574, and Rice 402. Of manuscripts, numbering 100 plus reels, Georgia has 139 and Rice 135; of documents, Ore-

gon has 300.

That periodicals equal only about 7% of the total reels of microfilm held by 64 libraries whose reports furnished data on this type of material came as a surprise to the members of the subcommittee. The comparative low number of reels of periodicals is due in part to that type of material having been available commercially just for the last few years, but the main reason seems to be due to libraries following a policy to wait and watch. How long the practice will continue. no one can tell: however, it is our belief that except for projects such as the early American and British periodicals, libraries in general will continue to be slow to increase their holdings of magazines on film in proportion to other resources. For that matter, the same is felt to be true for all types of microfilm acquisitions except newspapers. From time to time, there have appeared in the professional journals great claims for microfilm, and certainly it fills a very definite need, but until the reading machines are improved even more, the public is better educated in its use, and librarians overcome apathy, microfilm will remain largely a step-child of the various media and too often will be turned to only as a last resort for supplying needed references.

In answer to the question of whether the library was subscribing to periodicals on microfilm in preference to binding the printed issues, of a total of 70 replies, only 18 were in the affirmative. This figure is out of line with that furnished by Eugene B. Power, of the University Microfilms who reports 107 college and university libraries subscribing to current periodicals on microfilm. For newspapers on film, of 74 answers received by the subcommittee, there were 66

affirmatives.

A grouping by number* of current periodi-

Other subscribing libraries we learned too late to include in the report are: Skidmore 80, Vermont 80,

cals being received on film shows 8 libraries receive from 1 to 9, 2 have 10-15, and 6 receive from 20 to 67. Two libraries failed to specify the number received. The libraries subscribing to 20 or more titles are City College of New York 67, Arizona 50, Brooklyn 38, Pittsburgh 35, Iowa 32, and Southern Methodist 20. Of his 107 subscribing college libraries, Mr. Power indicates that 52 take 20 or more titles and that one library receives 125 periodicals. No doubt, the big difference in the findings of the subcommittee and in the report from University Microfilms is that the smaller libraries are those subscribing to periodicals on film, because in the main the smaller libraries were omitted from the survey as it was not expected that they would be the principal subscribers.

Although not surprising, it is interesting to learn also from Mr. Power that of the total of 223 libraries subscribing from his company for current periodicals on film, 116 are public libraries, and one of the number receives as many as 156 titles. The service has been operating for a very short time and the figures may only mean that college libraries were slower to act. Of further interest is his state-

ment that

". . . the tendency is to purchase the most popular and most used periodicals, whereas, actually, intelligent application of this whole theory would indicate that the less used, but nonetheless space-consuming, foreign periodicals are the ones which should be kept on film. All of this indicates to me that librarians have not as yet carefully and thoroughly thought through the application and the implications of microfilm copies.

It is interesting to note, however, that libraries which started the program in 1950 are continuing it and in a very large majority of cases are expanding the number of titles which they keep on microfilm. In addition, new libraries are coming in quite frequently, which indicates an increasing interest and

approval of this method.

Any program of this sort must of necessity start slowly, and we are not disappointed that it has not gone faster. In fact, it has gone about the way we anticipated. However, we are convinced of the soundness and logic of the program, and that it will continue to grow." Unfortunately, our data do not reveal the number of copies of a title or all the titles on subscription nor does University Microfilms. However, Mr. Power states that of the approximate 800 titles available, from 1 to 57 copies of one or more of 500 periodicals are being sent to libraries. In comparing the difference between the 1950 and 1952 lists of magazines from University Microfilms, we found that 116 titles have been crossed off the 1952 list and that they may be discontinued "because of lack of interest." Fortyfive periodicals have been added to the 1952 list, making a total of 774 of which 116 may be discontinued.

Generally, the reasons for selecting titles to be received on microfilm by the above libraries were limited demand as currently received, little used when older than several years, cheaper than binding, and for experimentation. Five of the six libraries receiving microfilmed periodicals although not binding the printed issues are still retaining them for one reason or another, but mainly because microfilm as a substitute for printed periodicals has not yet proven satisfactory in all respects.

Of special interest were some of the comments from a few of the librarians experimenting with periodicals on microfilm. Jerome Wilcox of the City College of New York

wrote:

"We are not experimenting with any of the popular periodicals but only technical periodicals. Since this is the first year we have attempted the experiment, we are not prepared to make any final statements. So far, students and faculty have made the following comments concerning microfilm editions:

- a. Student and faculty members invariably prefer book material but do not object to microfilm.
- b. Evestrain rarely reported.

c. Opinion is equally divided on reading speed—microfilm vs. codex book.

d. There is a slight amount of inconvenience to both clientele and library staff in setting up and manipulating machines, but this is far outweighed by shelf space saving.

 e. Illustrations in color (particularly covers) not clearly photographed; perhaps camera technique could be improved by use of filters, different exposure times, etc.

This experiment is being run entirely by School of Technology students and faculty.

California State Poly. 56, Wright Junior 50, Idaho State 28, Principia 25, Tarleton State 22, Howard Payne 20, Rosemont 13, George Pepperdine 12, and New Hampshire 3.

They are introduced to the operation of the equipment and thereafter operate it themselves. Since these students are mechanically minded they can probably be entrusted with operating this type of machine better than would other types of students.

We hesitate at this time to make any broad recommendations concerning widespread adoption by libraries of microfilm substitutes for bound volumes for technical periodicals."

From Pittsburgh, A. L. Robinson stated:

"We have a very favorable reaction to the use of film as a substitute for the printed issues. No popular titles were selected. We believe that the cost of servicing the film to the public is less than it would be for bound volumes. The films are kept in the Reference Department where our film readers are also located so that we can produce the reel of film much more quickly than the bound volume which has to be brought from the Stacks which are a considerable distance away. If the client has used one of our microfilm readers before, we permit selfservice of the film. If the client is using film for the first time, a Reference Department assistant places the film on the reader and removes it after use. Even this much service we consider to be less than that involved in supplying a bound volume.

We are very satisfied with our program largely because we seem to have selected titles which are seldom called for. This was our major purpose. As I have pointed out, these films can be supplied to our readers more quickly than bound volumes. The films cost no more than binding, which we have now discontinued for these 35 titles. We will soon decide whether to discard the printed issues. I suspect that our decision will be to discard them and thus a certain amount of stack space will be saved in addition to the other advantages pointed out."

On the basis of experience at Brooklyn, Humphrey Bousfield reported:

"To date the use of the microfilm copies has been relatively small due to the fact that until very recently we had not discarded any printed issues. There are distinct disadvantages in the use of microfilm. We have only two 'readers' so only two persons can be accommodated at a time. More time and labor is employed in installing the film than in charging the bound volume. This is especially true where the reader desires only to scan several volumes. We do not permit readers to install films as this may damage

either the micro-reader or the film. On the other hand, as microfilm copies never circulate, no time is lost in locating a film; nor do film copies suffer mutilation.

Probably the most serious objection we have found concerns not the use of the microfilm but the microfilming itself. In nearly every case where the index was published separately and issued some time after the completion of the volume, the index was not included in the microfilm. We have had extensive correspondence with the firm on this matter. Not long ago they stated they would suspend operations until they had straightened out this matter, but only last month we received another title where the index was missing. Considerable time is spent examining film for such errors. In one case a spot check revealed that the inside front cover and first page were omitted. In another case the tpi was microfilmed where the publisher had tucked it in behind the cover of the last issue, instead of photographing it at the beginning of the film. In several instances where the publisher employs dark-colored covers, the covers are completely or almost completely invisible on microfilm; the cover illustrations of Nature Magazine, for instance, are virtually invisible."

Mr. Robert Trent's statement from SMU was:

"We selected only scientific, technical and professional journals on microfilm, those which are necessary for research but which will not be frequently used by anyone and hardly ever by undergraduates.

Film is an unsatisfactory substitute for the original. It is more inconvenient to use, it is harder on the eyes, charts and diagrams on film are not too satisfactory, cost of servicing a film is greater than a bound volume. Yet, it is the only answer to the storage problem.

We would not recommend that other libraries buy much used periodicals on film unless they can also bind the originals. Many people forget, in counting the saving of film over bound volumes, that additional reading machines are necessary, that these are expensive, and that they take floor space and servicing.

We do not regret our decision so far, but we have tried to be very careful in our selection of titles. We do not do a great deal of research nere now. As our research program grows, we may have problems."

At Iowa, the variety of titles selected was wider, and so the experiences have been somewhat different. Norman Kilpatrick replied:

"On list I, you will find such titles as, the Atlantic Monthly, Foreign Affairs, Harpers, etc. We experimented with this type of material on film, thinking that after the first year these general periodicals were infrequently used and, therefore, the film copy would be sufficient. However, our experience so far has proven that this is not so and we recently decided that we would continue to bind Atlantic Monthly, Harpers, Reader's Digest and Popular Science Monthly. We are going to try out a scheme of plastic binding which we can do here rather than send the items out. We did not discontinue the film for these titles because frequently an issue is missing and the use seemed heavy enough to warrant having a film as well as the bound copy. For the other material on this list, Country Gentlemen, Library Journal, National Real Estate and Building Journal, etc. we are still withholding a final opinion.

On list II, you will note that all of the material is medical. Here we were of the opinion that the quarterlies and the reviews were used extensively when they first came, but little use was made after a few months. Two of these titles, Occupational Therapy and Rehabilitation and the Quarterly Review of Ophthalmology and Allied Sciences, have had such heavy use that we have decided that the film is no substitute and, therefore, have canceled the film subscription for these titles.

It is our opinion that for journals that have considerable use the film is not satisfactory; but that it is satisfactory for those journals that have very little use after the first few months. I am not able to define exactly what titles these would be, but in our situation we would include such items as, Quarterly Review of Biology, Quarterly Review of Medicine, Quarterly Review of Obstetrics and Gynecology, Country Gentlemen, Library Journal, Social Forces and Survey."

Of 75 replies received to the question, "Do you contemplate changing the current magazine files from binding to film?" only 40% were unqualified. There were 26 "No's"; 7 which stated "No, with exceptions"; 1 "Save as needed"; 1 "Can not answer now, undoubtedy will come to it"; 2 "Discussed"; 8 "Considering"; 11 "Not at present"; 1 "Would like to"; 1 "Few, soon"; 1 "Selected group in two years"; 1 "To experiment in one department"; "Plan in a year or so"; 6 "Experimenting"; 1 "Yes, but wish to retain printed copy"; and 4 "Yes's." Certainly, it is evident librarians at least are thinking on the question of microfilm as a substitute for bind-

ing, but mainly because storage space has become so pressing a problem. The one most optimistic library reported that 50% of its periodicals would be on microfilm if proven satisfactory after 5 years of service.

For newspapers, the grouping by number of titles received is as follows: 44 libraries receive fewer than 13 titles, 3 are in the 20's, 2 in the 30's, 2 in the 40's, 1 in the 50's, and one receives "too many to list." The other 13 libraries reporting newspapers on microfilm in preference to binding fail to list the number of titles being received. Further analysis for the libraries with fewer than 20 newspapers show 12 have 1 title, 13 have 2, 5 have 3, 3 have 4, 3 have 5, 4 have 6, 1 has 7, and 3 have 13. Almost without exception, the one newspaper received on film is the New York Times, even where it is the only title.

Do libraries have definite policies for the purchasing of microfilm? Seventy-two libraries furnished answers to the question. Forty reported negatively, thirty replied affirmatively, and two were classed as limited. The point on which there was the most agreement was that newspapers if kept on file should be on microfilm. Other factors common in the policies were meeting urgent needs for graduate and faculty research, acquiring items available in print but too costly to buy, completing gaps in perodical runs, to overcome bulk and disintegration, to save purchasing rare and expensive items, to make available little used material and especially sets of limited use, and to acquire only when available in no other form except microfilm. Points mentioned singly by the libraries as a part of their policies were the acquisition of general and literary periodicals prior to 1850 as available on microfilm, scientific magazines when too expensive or unavailable otherwise were to be bought on film, to purchase microfilm of some principal source materials and early runs of research periodicals where use is limited, to acquire long runs of foreign periodicals, to save wear and tear on originals, and to meet interlibrary loan needs. Only two libraries mentioned a time factor in their policies, one stated, "Monographs-Refer/items searched for one year to source of request for decision on purchase of film. Serials-Missing issues-Order is submitted with note as to whether microfilm is acceptable after trying two dealers for originals."

other reported, "Books: If we cannot obtain original, and at a satisfactory price, we purchase on microfilm after a 'search' period of 6 months." Another comment of interest on a purchasing policy was the statement from one library that its policy was one of expediences and that it was "reluctantly backing

into using microfilm."

Of governing factors in purchasing microfilm, the one reported most important was the saving in storage cost or in space, fifty libraries listing it. Other points given, in order of number, were the saving in purchase cost 45, the use to which the material was to be put 13, the availability of a needed item 11, preservation of the material 4, the binding cost 3, satisfying of the faculty 2, condition of the paper 2, the time in which an item had to be furnished 2, and one each for subject content of the desired item, format of the publication, importance of the material, and service economy.

On the question of whether a film would be purchased only when the codex book was unavailable, there was a more nearly equal distribution of answers than on any other. Thirty-three libraries reported negatively and thirty-one replied affirmatively. Quite a number answering "yes" made the qualification of "generally." So strong is the aversion to film by a few libraries that where a printed book can not be bought it will not be supplied if available only on film. In quite a number of instances, the decision as to purchasing film, if available only in that form, was reported to be made by the user of the material.

As a matter of fact, in answer to the question, "Has the reaction, whether adverse or favorable, in using film been a major consideration in your microfilm acquisition program?" the libraries reporting "Yes" numbered 12 and those replying negatively totaled 54. Several librarians stated that the program had been slowed considerably by the resistance to film, a couple of others reported buying film only with the approval of the academic departments, and there was one specific instance where acquiring the New York Times on film was delayed two years because of adverse opinion. However, other libraries reported favorable reception of film had acted as a stimulant to the buying program and one institution sometimes splits the cost of the film between the library and an academic department. There was only one report that

newspapers on microfilm had been purchased because of faculty insistence.

Of 75 libraries reporting on their microfilm facilities, only three claimed them to be ex-Forty-six others replied that they were adequate and 26 reported them to be inadequate. No definition was given in the questionnaire for the meaning of "adequate," and so the standards set are those of the individual libraries. Some did state, however, that the facilities were adequate for present needs. In comparing the microfilm holdings, the number of reading machines, the locations of the machines, etc. for the seventy plus libraries, there was the feeling that many of the libraries reported as adequate were really sub-standard in their microfilm facilities. Of course, the quality of the microfilm accommodations are really only the concern of the individual library; however, the subcommittee does believe that the better the facilities. the more chance there is to educate the clientele to satisfied use of microfilm, and thereby. the greater the opportunity to broaden the resources of the library.

The number of reading machines reported for 75 libraries was 307, which would be an average of four to an institution. Actually, a grouping by number shows the following: 13 libraries to have 1 machine, 13 with 2, 18 with 3, 12 with 4, 1 with 5, 6 with 6, 2 with 7, 3 with 8, 1 with 9, 3 with 10, and one each with 12, 15 and 21. Libraries having four or more readers are California 21; Chicago 15; Virginia 12; Columbia, Illinois, and Michigan Univ. 10; Wisconsin 9; Duke, North Carolina Univ., and Ohio State 8: Harvard and Kentucky 7; Brown, California at Los Angeles, Johns Hopkins, Missouri, Pennsylvania State and Princeton 6; Wayne 5; Arizona, CCNY, Emory, Georgia Tech, Iowa Univ., Minnesota, Rochester, Southern California, Stanford, Utah, Washington (Seattle), and

Yale 4.

No doubt, quite a number of local factors determine how many reading machines are necessary to provide good service to a microfilm collection. To be sure, there is some degree of correlation between the number of reels and of the machines but it is not high. For example there are eight libraries with more than 2,000 reels of film but with four or less machines and yet six libraries with fewer than 2,000 reels have five or more readers. As to be expected, the amount of

graduate study is a determining factor in the number of readers, but this can not be claimed as the most important factor. To arrive at any definite conclusion, much more will have to be known of individual libraries than we know now.

By far the favorite make of reader among the libraries reporting is the Recordak, 167 of one model or another out of a total of 307 machines being in use. Second highest is the Spencer with 48, third is the Argus with 33, and fourth is the Griscombe with 32. No other make of machine was reported in more than nine libraries, although ten additional trade names were listed. Of the thirty portable readers available, several libraries stated they are loaned for as much as two weeks and one library has a loan privilege of three weeks. To make microfilm more convenient in its use, the day will have to come when many libraries have portable readers to be issued on loan.

In the location of the reading machines for servicing, it was expected that most libraries would list them as being in the reference room or department, and such was the case, fourteen being so reported. Other favorite locations were the stacks, periodical room or department, special collections room, circulation department, librarian's office, and rare book room. Machines have also been placed in the interlibrary loan office, graduate reading room, map room, newspaper room, audiovisual department, science room, archives section, music room, acquisitions department, modern language room, mathematics office, graduate history room, and English seminar. Reading machines also were reported as having been placed in the departmental libraries, the practice being to shift the older models to the branches. Thirty-two libraries indicated the reading machines are in a separate room but only three noted a microfilm reading room or department. Fifty-five of 72 libraries have their machines in locations which are dark or which may be darkened.

What proportion of the users of microfilm are undergraduates, graduate students, faculty members, and others? The percentage average for the 63 libraries replying to this question was 22.08, 43.27, 30.95, and 3.74 respectively. As one might imagine, however, the group of users varied greatly from library to library. For undergraduates, 13 libraries indicated no use, 33 reported 25% and less of total use, 8 from 26% to 50% of the users, 4

from 51% to 75%, and 5 with 76% or more. The highest percentage of undergraduate use in a library was 92% but another had 90%. The breakdown for graduate students was I library with no use, 17 with 25% and less, 27 with 26% to 50%, 13 with 51% to 75%, and 5 with 76% or more. Faculty use indicated one library with no patrons, 35 with 25% and less, 18 with from 26% to 50%, 7 with 51% to 75%, and 2 with 76% or more. Of users classified as others, 37 libraries reported none and the percentage for the other libraries ranged from 1 to 60. As more newspapers and magazines are placed on film, there can be little doubt but that the undergraduate use will increase proportionately. Such a trend may have drawbacks on the one hand but it should be a boost to the microfilm program in helping students to become educated sooner than normally to the use of film in libraries.

To have some data directly from the users of microfilm, 20 patron data forms were sent to eighty of the libraries with the request that the forms be completed. Most libraries were reluctant to ask their clientele for cooperation, and so only 496 completed forms were returned to the subcommittee. From the answers, we learned the frequency of microfilm use by nearly 500 patrons during the regular school year or nine months was as follows:

71 1 time 106 2-5 times 87 6-10 times 55 11-20 times

176 more than 20 times

The length of time the machines were used was: 28 for 15 minutes or less, 61 for 15 to 30 minutes, 103 from 30 to 60 minutes, 173 from 1 to 2 hours, and 131 for more than 2 hours. Of the types of material used on microfilm, newspapers led with 239, books were used 101 times, magazines 52 times, and other than these but generally manuscripts 184 times. In some instances, more than one type of material was checked. In regard to the reaction to the use of microfilm, 285 patrons indicated that although the printed or codex book was preferred there was no objection to microfilm, 89 expressed a preference for microfilm, 72 stated no preference, 47 objected to using film, and 3 supplied no answer. As to be expected, the most common objection to microfilm was that it caused eyestrain, but

other factors with a high number of checks were "cumbersome to use," "inconvenience in scheduling the reading machine," and "headaches." More than half, 282 to be exact, of the patrons reported microfilm can be read as rapidly as a codex book. The final item requested classification of the user as to undergraduate, graduate student, faculty member, or other, and of the 496 replying the division was 77, 219, 142, and 53 respectively. These figures on the users of microfilm do not compare unfavorably with those reported above as the average for the 63 libraries furnishing user data, although arrived at quite differently.

Summary: From data submitted by 76 college and university libraries, certain findings on microfilm in this type of library are now evident. The libraries in most states of the nation are represented, and although the greatest number of them are the largest libraries, included too are those of some of the youngest institutions. Not too numerous are the smaller libraries, those whose holdings of books number less than 200,000 volumes and whose student clientele is below the 5,000 mark.

The combined microfilm holdings of the libraries number 164,571 reels. Deducting 21,047 reels not divided into type of publication on film, we find that of the remaining newspapers constitute nearly 69% of the total, books 12%, manuscripts 7%, periodicals slightly less than 7%, documents 5%, and separates 1%. The number of reels in the microfilm collections of the libraries ranges from 3 to 20,000 reels. Thirty-three libraries own less than 1,000 reels each, 20 have from 1,000-1,999, and 23 report 2,000 or more.

The number of reels of newspapers most common to libraries is fewer than 600, 35 libraries reporting in that range, but of periodicals it is fewer than 100 reels.

With but a few exceptions, the libraries have ceased to bind newspapers which are to be retained indefinitely, but instead are using microfilm for preservation and storage. The reasons for this change are obvious and need no explanation. Sixty-six of 74 libraries report current newspapers on film where they are to be kept permanently. Periodicals, however, proportionately are being changed rather slowly to film and mainly in the smaller libraries, and yet microfilming seems to offer the best solution to the costly problem of storage.

University Microfilms advises that of 107 college libraries subscribing to from 1 to 125 current periodicals on film, 52 of the libraries receive 20 or more titles. This number of subscribing libraries is much higher than the 18 reported to the subcommittee, and of the 18 only 6 receive 20 or more film subscriptions. Apparently, this difference is due to'so few small libraries having been included in the survey. Considering that 116 public libraries also subscribe to periodicals on film and that commercially film subscriptions have been available but a few years, there seems to be little doubt but that librarians are considering the utilization of film in preference to binding more rapidly for magazines than they did for newspapers. Of course, if the change is to be made, the sooner the better, but in most of the libraries, there is still a strong inclination to follow the policy of waiting and watching. There is, to be sure, much interest evidenced in the change and only 20% have rejected the idea completely.

With college and university libraries the policy has been to select titles on film which will be little used, mainly scientific, technical, and professional journals, and so far the majority of the libraries seems satisfied. Certain objections have, of course, been made, notably the absence of color from pictures and the blackness of pictures in film, and there are still "bugs" to be worked out in the filming of the magazines by the processors, but on the whole the reports are encouraging.

The two main factors in placing magazines on film rather than binding them are the saving in space and the difference in the cost of the film and of the binding costs. Other important factors are the use to which the material is to be put, and the availability of a needed item.

No figures are available for comparing the current patron reaction to microfilm with that of ten years ago, but gradually microfilm is becoming better accepted, and as more undergraduates use film, the opposition to it will be lessened considerably. The percentage average for 63 libraries showed microfilm users to be 22.08 undergraduates, 43.27 graduate students, 30.95 faculty, and 3.74 others. Of 496 users of microfilm 285 indicated a preference for the codex book but had no objection to film, 89 expressed a preference for film, 72 stated no preference, 3 supplied no answer and 47 definitely objected to using it.

There is a strong feeling on the part of

Table I Reels of Microfilm Resources by Types of Publications

Reels	Libraries	Libraries with Newspapers	Libraries with Periodicats	Libraries with Books	Libraries with Manuscripts	Libraries with Documents	Libraries with Separates	
0			10	11	30	26		
1-90	3	7	2.2	27	2.5	37	35	
100-249	.3	8	30	5	8	6	5	
250-490	8	1.5	0		5	3	1	
500-749	0	10	3	5	3			
750-000	8	6		7	8			
1,000-1,400	8.5	8	1	3	2	1		
1,500-1,000	7	4			1.			
2,000-2,000	2	\$		X .		1		
1,000 1,000	7	3						
1,000-1,000	6							
5,000-5,000 6,000-6,000	1							
7,000-7,000 8,000-8,000	ı							
0,000-0,000	1	1						
10,000-	2	2						
not divided		6	8.3	8.3	8.8	1.3	13	
	-	-	-	witte		rand	1000	
otal of Libraries	76	76	76	76	76	76	76	

Table II Institutions with 1000 or More Reels of Microfilm

Institution	Total Reels	Reels of News- papers	Reels of Periodi- cals	Reels of Books	Reels of Manu- scripts	Reels of Docu- ments	Reels of Sepa- rates	Reels Not Divided
Alabama	1,51000							1,310**
Arkansas	8,520	1,276	182	31		33		
Brown	3,607**							3,607**
California (Berkeley) California	4,676	605						4.071
(Los Angeles)	1,838	544	209	493	331	28	213	
Chicago	20,000	15,000						5,000
Colorado	1.077							1,077
Columbia	5,841	2,815	350	652	1,282	8.4	Bo	
Duke	4,118	2,783	250	850	155	50		
Florida State Univ.	4,206	4,036	7.	60	103			
Florida	1,465	3,046	116	208	89	00	7	
Harvard	4.500	3.375						1.125
Illinois	1,800	1.847	150*	Soo*	950*	100*	43*	
Indiana	1.235	908	16	3.8	156	108	86	
Iowa Univ.	2,800	1.582	114	889		215		
Johns Hopkins	1,000	431	238	155	30			
Kansas	1,162	793	200	131	4		25	
Kentucky	2,455	1,045	176	651	383		7	
Louisiana State	3,138	2,418	210	030	505		5	
Michigan	4,671	450	550	2,961	500	200	3	
Minnesota	7.833	4.971	403	1,127	90	1,188	44	
Missouri	15,000	11,500*	8,200	1,000	1,000	300	44	
New Mexico	1,100*	370*	8,200	8,000	1,000	300		730*
North Carolina	1.200	528			334	2,263		135
Ohio State	1,000*	340			3.34	41,000		\$000,1
Pennsylvania	4,000	2.738	184	870	108			* * 0000
Pittsburgh	3,894	2,908	267	506			76	
Princeton	2,596	1,308	425		35	558	69	
Rochester		008	70	1.57	81	3.50	01	
Rutgers	1,076	1,181	66	311			4	
South Carolina	1,371	1,228	1		104	4.00	4	
Southern Calif.	1,350		98	3	50	-50	1781	
		440		117	97	97	1701	
Stanford Temple	1,073	703	2.5	78	236	3.5		
	1,855	1,018	242	565*	30			
Tennessee	1.555	889	400	28	89	145	4	
Texas	3,154				1,571			1,583
Utah	2,052	1,637	415		-49		18*	
Virginia	1,779	295	030	797	568	9.0		
Washington (St. Louis)	1,603	1,617			39	3	34	-
Washington (Seattle)	1.440	307	5.4.5	-				540
Wayne	1,000	90	150	800		001		
Univ. of Wisconsin	9,500**	0.000						500
Vale	2,000	1.1000	170	7500	3708			

[†] Indicates music scores.

* Figure estimated.

* Alabama reported r.310 cataloged items, Brown 3.607 pieces and rolls, and Wisconsin includes State Historical Society

the subcommittee that much of the objection to microfilm is psychological. No tests have been made to learn how valid the objections expressed most often really are. No doubt, a contributing cause to the aversion for film is that the microfilm facilities are substandard. Only 3 of 75 libraries indicated their facilities were excellent and in each of these there was a high percentage of satisfied patrons. Certainly, there is great need for educating to film use not only the public but also librarians, many of the latter being apathetic and even daunted because some slight mechanical sense is required.

Just how far libraries will go in using film in preference to binding, no one can say for sure. The time must pass to permit a thorough comparison of the different types of micro-reproduction. No doubt, the five year experiments being conducted with microfilm by several college libraries will go far in providing necessary information for a decision. Possibly, by 1960 many librarians will have taken a definite stand, but of course, many others will still be waiting and watching. However, until there is developed a form of reproduction which will suit the library clientele better, and yet offer as many advantages as microfilm, at least for much of the periodical literature, there seems no better solution to the problem of costly storage.

American Historical Association

(Continued from page 306)

sults of the various microcopying projects. It is the desire of the committee to promote the principle of a centralized depository in the Library of Congress in connection with an inexpensive interlibrary loan service. This principle the Librarian of Congress has indorsed.

But interlibrary loan service to be effective must be supplemented by a publication of the micro-acquisitions, both old and new, of the Library of Congress so that scholars will know what is available. The committee is endeavoring to publicize the results of its programs by printing the checklists of materials obtained and deposited in the Library of Congress in the Annual Report of the American Historical Association, Vol. I. Proceedings as supplements to the annual committee reports. We

are encouraging our jointly sponsored research scholars to submit for publication in the American Archivist articles related to their work in foreign archives that will be helpful to colleagues who may follow them in work abroad.5 Attention should also be called to the Library of Congress Quarterly Journal of Current Acquisitions for information regarding the microfilm holdings of the Library of Congress. I wish in particular to cite an article in the November, 1952 issue of the Quarterly Journal by Dr. Lester K. Born, entitled "Microreproductions" for an excellent summary of the Library of Congress holdings in micro-materials, as a good start for learning of the vast resources that already have been acquired by the library and that are available to the scholar.

Suggestions for ACRL Publications Committee

One of the functions of the ACRL Publications Committee is to recommend needed book-length studies in the college and university field to the ALA Publishing Department. There are, undoubtedly, many good ideas for books in the minds of ACRL members, and, in order to get them discussed and presented to the ALA Publishing, such requests should be channeled to the ACRL Publications Committee. ACRL members who have suggestions are requested to send them to Lawrence S. Thompson, chairman, ACRL Publications Committee, University of Kentucky Libraries, Lexington, Kentucky.

⁴ For checklists submitted by research scholars jointly sponsored by the Committee on Documentary Reproduction and the Library of Congress see "Committee on Documentary Reproduction," Annual Report of the American Historical Association for the Year 1951; 1952, Vol. I, Proceedings (publication pending)

⁶ For articles already published see Rice, Howard C., Jr., "The Paris Depository for Notarial Archives," American Archivet, 4:99-104, April, 1951; Topping, Peter, "The Public Archives of Greece," American Archivet, 15:1249-257, July, 1952.

The Use and Administration of Audio-Visual Materials in Colleges in the Pacific Northwest: Report of a Survey

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THIS SURVEY was undertaken to learn what four-year colleges in the Pacific Northwest are doing and have been doing in the use and administration of audio-visual materials. The colleges to which the questionnaire was sent are located in Oregon, Washington, Montana and Idaho, and are those listed in Lovejoy's Complete Guide to American Colleges and Universities. State universities were not included nor was Oregon State College. This was done because obviously the universities' funds and facilities would be much larger than those of the other educational institutions in this region. Oregon State was not included because on its campus is the Division of Visual Instruction which serves all the schools in the Oregon State System of Higher Edu-

The colleges returning the questionnaire present a cross section of institutions of higher education in the Northwest. These comprise 12 small, private, liberal arts colleges, four colleges having a combined program of liberal arts and teacher training, two teachers colleges, two land-grant schools, and one technical institute. Enrolments range from 110 to 5000 students and faculties from 10 to 600; eight schools have more than 1000 students, six have 500 or more and six have less than 500.

The questionnaire was designed to gather information regarding audio-visual aids used, the subject fields in which used, selection of materials, the handling of those of which the library has charge, the records kept to facili-

tate ordering, scheduling, lending of films and other materials, and suggestions for improvement of their present programs.

Of the audio-visual aids used in the colleges replying, films, filmstrips, slides and recordings are the most popular; transcriptions and flat pictures are less in demand. One school reported using a flannelgraph, and two, one in Idaho and one in Washington, have television sets.

The fields in which audio-visual aids are used in teaching show a wide range, implying that resources are available in many fields. Among those listed are the following: education and psychology, music, speech, foreign languages, literatures, humanities, history, business, sociology, religious education, nursing and health, physical education and training. fine arts, manual arts; and in vocational courses such as electrical, civil and mechanical engineering; metallurgy, optometry, veterinary medicine, animal husbandry, Air Force R.O.T.C.; and in the sciences-biology, chemistry, geology and physics. The order in which the above are listed here does not indicate the frequency reported in the replies.

Because previewing films and other such materials before showing has been stressed in audio-visual courses, it was somewhat surprising to find that doing so was not a general practice. Lack of time or lateness in arrival of films may be responsible for this situation.

Teaching with audio-visual aids has been going on in these colleges for some time, for a third of those replying have been using them for more than ten years, another third has been using them for ten years and the others have used them for the past five years. All report that there has been an increase in use the past two years. The reasons which are

given for this may be listed under headings such as (1) improved services, which include a better system of ordering and scheduling of films and improved techniques for keeping faculty informed of materials available: (2) more materials available in a larger number of fields, they can be obtained from nearby sources, quality is improved, the cost is less, and colleges have made more filmstrips and enlarged their slide collections; (3) physical equipment and facilities-new buildings have audio-visual facilities, equipment is better and there is more of it: (4) administration and faculty are more sympathetic toward the use of audio-visual teaching aids, they are more aware of the wide range available and of their value in instruction; too, more faculty members are prepared to use them; (5) more publicity given these materials, for coordinators and directors of audio-visual centers and librarians have carried on a continuous campaign to increase their use. The above reasons coupled with new courses being offered in colleges, and the development of departments for acquiring equipment and collections of suitable materials have resulted in increased financial support and wider use.

. There seems little relationship in the size of the college and the amount of equipment owned by it. Rather the type of school and subject fields emphasized in the curriculum seem to determine the situation. The one technical institute replying has an enrolment of 258 students and owns 28 projectors; a state college with an enrolment of 5000 students owns 20: and a school with a combined liberal arts-teacher training program and 1074 students has 13, the next largest number. Both students and faculty members operate the equipment, but faculty members or members of the audio-visual department take care of it. In several colleges students care for it under the supervision of faculty. In addition to projectors the schools own different types of slide projectors, recorders, both wire and tape, filmstrip previewers, radios, playback machines and television sets.

Audio-visual materials for purchase are selected by various persons, no one person or department being responsible in all the schools. In some the librarian and the business manager do the selecting. In others faculty members recommend and the business manager decides which ones will be purchased. Or the heads of departments choose the ones after conferences with their members. In schools having coordinators or directors of audiovisual programs, these do much of the selecting in conference with faculty. When films are rented, faculty members select them.

According to replies received, there are few or no standard sources used in the selection of these teaching aids. Two small, liberal arts colleges go to local audio-visual companies in Portland where the schools are located. Another small, private college with close denominational affiliation, consults its field men. Another bases its selection on materials with which the faculty is familiar. One college gave this list as the source its faculty consults: "catalogs available such as Coronet, Jim Handy, Northern School Supply, Free Films, Slide Films, and Teaching Film Annual." The State College of Washington at Pullman has an extensive program of selection about which it says: "We have a complete file of all sources. A staff of seven has spent the past year in searching for and screening 6500 films and filmstrips to approve those suitable for use as overseas training and information films. These are now being used by the U.S.A. in the Marshall Plan countries." Not any of the other colleges reporting have such extensive resources or facilities. When selecting materials some refer to lists in textbooks, in professional journals, and to lists from public libraries, industries and large corporations,

Small colleges are just beginning to set up programs for purchase of equipment and materials. The larger ones, on the other hand, have extensive plans for expansion of their programs. Budgets range from \$100 in the smaller institutions to \$8000 in the largest. One college has \$2000 for purchase of equipment and an equal amount for materials. Some have no separate budget for this kind of material and part of the library fund is used.

The schools having programs and budgets also have storage facilities for their equipment in audio-visual centers. In others equipment and materials are scattered over the campus in faculty members' offices, in departmental offices, and in the library. Faculty members have charge of storage places, except when the library is used in which situation a member of the library staff has charge.

Not all colleges reporting subscribe to magazines which deal with audio-visual materials.

The two magazines most frequently received are Audio-Visual Guide and Educational Screen which go to eleven schools. See and Hear is received by four, and Audio-Visual World is listed on three replies. Other periodicals mentioned are Radio Electronics, Radio and Television News, Photography, American Photography, Sound Tips, Audio Record, and Film Counselor.

Some of the schools queried catalog their audio-visual materials, but the cards for these are kept in a file separate from the regular card catalog. Most of them rent the films they use, but slides are kept in the departments

in which made, or by students if they made them. As more funds are allotted, a larger number of schools are buying equipment and

will purchase materials later.

Answers to the question of whether the library should have a part in the audio-visual program varied according to whether a library staff member or a faculty member filled out the questionnaire. Librarians, of course, replied that not only should the library have a part in the program but should be the center for audio-visual aids. Only the larger library buildings or those built or remodeled recently have adequate space. Too, only libraries having adequate staff could accept the additional responsibility of administering the program. Some of the reasons advanced by the librarians for being the audio-visual center were: the library has an established ordering system, full-time supervision is available, the library is open more hours than any office or department on the campus, and the library is not affected by sudden change of policy. This last reason might not be valid, for library practices usually conform to the needs of its students and faculty. However, the turnover in library personnel may be smaller than that in other departments. One faculty member's reply reflects the viewpoint of some, for he states: "No, it (the library) should not have (a part in the audio-visual program). Li-Brarians have all they can do to care for books and periodicals. It is better to have a separate audio-visual center even if it is no bigger than an office for a starter. A librarian can not well take time to check machine conditions and adjust." Another faculty member wrote: "I am not a librarian, and I am wondering why librarians should want to trouble themselves with the work and the

service involved. This alone can reach such a large proportion that an audio-visual coordinator who can make adjustments and minor repairs is a desirable officer. Materials are to be used and not to be waiting repair or adjustment."

The section of the questionnaire inquiring about records kept and forms used was the one most frequently not filled out. The records mentioned were requisitions for purchase, forms for requesting rental and those for loaning materials to faculty and students. Information included on these was brief, the main points being date, source from which ordered, date for which needed, title, department, cost, date when film must be returned, shipping charges. Forms for loan to faculty or students indicated date on which loaned, name of person or department to which loaned, and date returned. Order forms for purchase of material indicated date of order, source from which ordered, title or name of material wished, department or person for which ordered, date received and cost.

The suggestions for improvement of existing programs fall into general categories, such as centralization of materials and equipment in one designated storage place, separate and larger budget, increased space for quarters and staff, larger library staff to catalog materials, a full-time person to handle the materials and care for the equipment, and keeping faculty and administration informed regarding ma-

terials available.

The information provided by this survey might be summarized in this way: (1) it appears that colleges in this region are using various kinds of audio-visual aids increasingly in their instructional programs; (2) that the use of these materials is growing due to more and better equipment, the availability of more and better materials, and because more people know how to operate the equipment; (3) that college faculties are beginning to consider these aids as an essential part of their instructional materials, plan to set up programs for purchase of equipment and materials soon if they have not yet done so, and to employ a full-time trained person when the size of the program makes that necessary; (4) that faculty and administration are coming to realize that these materials can do a particular type of instruction more successfully than can be accomplished by any other means.

Brief of Minutes

Association of Research Libraries Feb. 1, 1953, Evanston, Illinois*

THE FORTIETH MEETING of the Association of Research Libraries was held at Northwestern University in Evanston, Illinois, on Sunday, February 1, 1953, beginning at 10 a.m. and continuing through the evening.

Upon recommendation of the Advisory Committee it was voted that the next meeting be held in the Clark Memorial Library in Los Angeles on Sunday, June 21, 1953.

Newspapers on Microfilm

It was reported that the Library of Congress was making good progress with a new and revised edition of Newspapers on Microfilm. It will contain perhaps 3200 entries, as compared with 800 in the first edition. It is expected that this work will be issued in a preliminary "checking edition" in the fairly near future, which, after criticism and correction and further expansion, will be reissued in final form.

Farmington Plan

On recommendation of the Advisory Committee it was voted that the association underwrite the publication of a comprehensive Farmington Plan Handbook. This work is in preparation at the Harvard Library and should be ready for publication this spring. It will be distributed to cooperating libraries and to Farmington Plan agents, but will also be

for sale to anyone who may be interested. It will contain a full record of Farmington Plan allocations, arranged both by subject and by institution, as well as an account of the Plan's history and development.

Mr. Metcalf, speaking for the Farmington Plan Committee, commented on some of the difficulties that had been encountered, notably in France where it has proved difficult to secure a satisfactory agent; and in the handling of newly established periodicals which are sent directly to receiving libraries according to classification and are often rejected by these libraries without this fact being reported, as agreed, to the committee; also in the application of the Plan to the so-called "critical areas" where want of bibliographical and booktrade organization, combined with linguistic difficulties, make it advisable to ignore classification and to assign all subjects to one or two institutions.

Mr. Metcalf noted that Korea has now been assigned as an added responsibility to California and that Northwestern has agreed to accept responsibility for Africa south of the Sahara, except for the Union of South Africa.

It was noted that the Plan has now been extended to all western Europe, outside the Iron Curtain, except Iceland, Great Britain, Finland, Greece, and Yugoslavia. After some discussion it was voted that Finland should now be brought in-publications in Swedish being assigned according to classification, those in Finnish (because of the language problem) to one or two institutions. It was also voted that Yugoslavia be brought in, perhaps with the aid of the Bibliographical Institute of that country acting as agent, and perhaps with the allocation made, in the critical area pattern, to a single institution. With respect to Greece, the Farmington Plan Committee was directed to investigate the situation and then make decisions in accordance with its best judgment.

There was a brief discussion of other parts

¹ Due to an early departure of the executive scretary on leave of absence abroad, a summary of the minutes of the 30th meeting (Princeton, June 26, 195.2) was not prepared for publication. The list of important matters dealt with was somewhat as follows: The Farmington Plan, including a limited study of its effectiveness, its extension to the Caribbean area and its further extension in the Near East and in South and Southeast Asia, and the preparation of a handbook of the Plan; plans for the microfilm publication of ductoral dissertations and their listing and abstracting in Microfilm Abstract; the continuation of the Committee on National Needs; temporary failure of the effort to get customs simplification with respect to the importation of library materials; study and experimentation, respecting a possible reproduction of the actional Union Catalog; the possible microfilm preservation of pulp paper books; the checking of periodicals in Chemical Abstracts; the Union List of Serials; the proposed ACRL interlibrary loan code.

of the world. Mr. Evans commented on the impossibility of getting anyone into Russia in the interest of the Farmington Plan. Mr. Metcalf noted that all Africa is now covered with the exception of the Union of South Africa and of French and Spanish northwest Africa. Special attention was given to Australia where we have a unique exchange arrangement with Mr. White of the Commonwealth Library. Comments were made that the arrangement is working very ineffectively, both with respect to materials received by American libraries and materials sent by them to Australia. It was agreed that the Farmington Plan Committee should ask participating libraries for a report on what they have received from Mr. White and what they have sent him.

With respect to New Zealand, Oceania, French Canada, and most of Latin America, where there is great difficulty in obtaining efficient agents, and where national bibliographies are largely lacking, it was voted that the Farmington Plan Committee go forward with the expansion of the Plan when and as it can find a way to do so. A suggestion was made that Mr. Metcalf might himself go to South America in the interest of the Plan. Mr. Evans remarked that the new chief of the Hispanic Foundation would probably be traveling to South America soon and he suggested that it might be possible to get him, at little or no cost, to look into the situation.

Publication and Recording of Dissertations

Mr. Ellsworth, chairman of the committee on this subject, reported that 32 universities have now joined in the cooperative plan which results in dissertations being abstracted in Dissertation Abstracts. If a dissertation is to be filmed by University Microfilms, Inc., it is commonly returned in three or four weeks to the university which sends it, and the abstract commonly appears in about two or two and a half months. No. 6 of Dissertation Abstracts, which carries the index, has already been mailed. Mr. Ellsworth felt that the plan was working pretty well. One improvement he has asked for, viz. that the name of the dissertation advisor or supervisor or director appear on the title page along with that of the author. It would then appear in the entry in Dissertation Abstracts. He felt that this information would be helpful to users of the dissertation or abstract and the practice of supplying it would tend to the elevation of standards.

Mr. Ellsworth commented on a proposal put forward by Mr. Rider to publish dissertations on microcards. He noted that this would be an "edition" form of publication which would doubtless make its way if it answered a felt need, but he felt that it had no direct bearing on the cooperative plan that his committee had developed, which had as its principal objective the development of one single tool which would supply abstracts of all dissertations. Beyond this, there could be edition publication in any form which might be desired.

Now that the cooperative plan which the Ellsworth committee has developed has been put into operation, it was suggested that it ought to be further publicized through the issue of a full scale statement concerning the new procedures for handling dissertations which could be put into the hands of appropriate graduate school committees. Mr. Ellsworth undertook to prepare such a statement at an early date.

Doctoral Dissertations Index, First Ten Years

The report of the committee on this subject was presented on behalf of Arnold Trotier, chairman, by Ralph Shaw of the U. S. Department of Agriculture Library, himself an experienced publisher. It is proposed to issue an author and subject index of the first ten years of Doctoral Dissertations Accepted by American Universities, the thought being that if this project meets with success it will be continued for the later years. Careful calculations indicate that, with nothing added for the work of planning, directing and supervising the editorial operations, the index of the first ten years could be produced at a cost which the Association could afford to underwrite and which could largely be recovered through sales. It was therefore voted that the committee be authorized to proceed.

Committee on National Needs

The work of this committee, which often deals with matters that are later brought to the whole association, is too varied to be reported here in detail. Some items may, however, be mentioned.

At the request of the committee the Library of Congress has issued a pamphlet entitled Postwar Foreign Newspapers: A Union List. This work is now to be criticized by the method of sampling, with a view to improving the coverage of foreign newspapers currently received by U. S. libraries. As a beginning it is proposed to test the coverage of India by submitting the Indian section of the List to experts in the University of Pennsylvania, Harvard, Yale, and the Library of Congress. The results of the criticisms will be considered at the next meeting of the committee.

The committee has also interested itself in the stimulation of the production of national bibliographies in countries in which they are now lacking. To this end it has recommended that ALA sponsor a plan for the inclusion of librarians from such countries in the Department of State exchange of persons program. The plan has been studied for the committee in some detail by Jesse H. Shera and embodied in a document which has been referred to the ALA Committee on Bibliography and is being brought by the latter to the ALA Executive Board.

With respect to the cataloging of Oriental books in which the committee has expressed a strong interest and which it has referred for consideration to the ALA Division of Cataloging and Classification, it was reported that the president of the division has carried to the Divisional Executive Board a recommendation that a committee be set up to prepare a code for the cataloging of Chinese and Japanese books which might serve as a basis for cooperative cataloging.

With respect to the so-called sub-publications of science (i.e. unpublished declassified technical reports) the committee has drawn attention to the Brownson study in LC Information Bulletin for June 2, 1952, which indicates that most of these reports find early publication in regular channels. It would seem, therefore, that librarians can afford to neglect this "literature" unless they have specific need for it in its original form. Nevertheless, encouragement was given to Mr. Metcalf and Mr. Tate to experiment with the consolidation of scattered collections of this material in the Cambridge-Boston area.

The committee has suggested to the chairman of the ALA Board on Resources, Mr. Moriarty, that the board accept an important responsibility for the planning of large-scale, cooperative microfilming projects, particularly with respect to foreign manuscript collections.

Prospects for Customs Simplification

Mr. L. C. Powell reported that the bill embodying this reform in which the association has long been interested and which failed in the last session of Congress, is being brought forward again in practically identical language. The committee will follow the progress of the new measure and inform all members of the association if any specific action should seem to be needed.

Licensed Importation of Chinese Books

This subject was discussed briefly and it was noted that participants in the cooperative scheme had met with varying degrees of success or failure. There was agreement that applications ought to be made for renewal of licenses for a second year.

Reproduction of the National Union Catalog

For information the chairman of the subcommittee of the Board on Resources (ALA) on the Reproduction of the National Union Catalog reported on the work which it had carried on during the past year with the cooperation of the Library of Congress. The subcommittee holds that a legible printed reproduction of the National Union Catalog, after proper editing, would be highly desirable and would find a considerable market if the project could be completed at a manageable cost. But it appears that such a reproduction might contain some 9,000,000 entries and might cost, for an edition of 1000 copies of 89 volumes each, something in the nature of four and one-half million dollars. It also appears that a considerable portion of this expense would arise from the preliminary, but necessary, work of "completing" the catalog, getting it filed up-to-date, and getting it properly edited. Though such preliminary work may be thought to be a direct obligation of the Congress, nevertheless, until performed, it stands as a terrible obstacle. Even if the cost to be borne by a private cooperative enterprise could be reduced to such a figure as \$2,800,000, it would still seem to be prohibitive. The subcommittee therefore plans to ask to be dismissed-not with the thought that this desirable project must be abandoned permanently, but rather that its report may stand as a kind of bench mark for the guidance of future efforts in some better day.

It is likely that a history and analysis

of the effort to reproduce the National Union Catalog will be prepared for publication at an early date.

There was discussion of the failure of the Congress to provide adequate support for the Union Catalog; and, although with some hesitation, it was voted that a committee be appointed to prepare for the use of members of the association a brief statement which would set forth the value of the Union Catalog and emphasize the importance of getting it "completed," filed up-to-date, and properly edited. Members would in turn make use of this statement in writing to their congressmen to urge more adequate support.

Filming, or other Preservation, of Pulp Paper Books

Mr. Pargellis, who had been directed to study this problem and make recommendations looking forward to a study project to be submitted to a foundation, reported briefly. Without much conviction he expressed the view that there might be some hope in the development of a chemical preparation (now being worked at) which could be applied for preservation to pulp paper before distintegration. In any case he felt it certain that there were many important works which could only be saved for the future by some form of micro-reproduction. Mr. Pargellis had had a contact with one of the foundations which had previously been interested in this problem and he thought this interest could conceivably be revived, though he was not very hopeful. He suggested that someone might profitably be employed for a year in checking collections and determining what works of paramount importance required preservation through filming. He proposed that the problem be referred for further consideration to the Committee on National Needs. After a brief discussion it was voted to so refer the problem.

Newspaper Microfilming (especially Latin American) and Charges Made Therefor

There was an extended discussion of the microfilming of foreign newspapers, which turned largely around Harvard's long-standing Newspaper Microfilm Project and a newer Cooperative Program of Microfilming Current Latin American Newspapers which is being promoted by Nettie L. Benson, librarian of the Latin American Collection, University of Texas.

It was announced on behalf of Harvard that prices would be reduced to a uniform rate of 9 cents per foot of film. Mr. Metcalf had recently circulated a letter to all subscribers and to members of the association in which he had proposed, as a possible measure of economy, a pool arrangement under which one negative and one positive would be made of each newspaper being microfilmed-the negative to be retained by the producer, the positive to be loaned free of charge to contributing libraries and on a fee basis to others. He explained that it was the Harvard view in this matter that in most cases the number of copies of a filmed title ought to be kept down (by the expedient of interlibrary lending) and that the main effort and resources ought to be devoted to getting into this country and available as many titles of foreign newspapers as possible.

The scheme presented by Miss Benson, on the other hand, had as its declared objective the reduction of microfilm prices to the lowest possible level by the expedient of getting as many libraries as possible to subscribe for the

film of a particular title.

The Harvard proposal of contributions to a pool which would open the way for free interlibrary lending among contributors evidently aroused some misgivings upon legal grounds among representatives of state institutions, but Mr. Coney expressed the view that if the plan was regarded as sound and desirable a way could certainly be found for state institutions to participate in it. Ben Powell suggested that the cooperative plan would certainly be more palatable if centralization could be avoided and individual libraries be put in a position to hold the master negatives of some newspapers of their own selection: they would thus have something material to show for the expenditure of their funds. Others agreed that there was no real objection to decentralization so long as information was centralized and the plan was made to work efficiently. Mr. Metcalf expressed a willingness to have Harvard turn over its project to the Midwest Inter-Library Center or to the Library of Congress. Mr. Fussler- explained current practice with respect to newspaper microfilming at MILC. He said that when a title is selected for filming the Center makes a negative and a positive, the former to be held for preservation, the latter to be used in lending. If a member institution in MILC holds a newspaper on film which it is willing to lend, the Center would duplicate it.

As between the Harvard concept and the Benson concept, the sense of the meeting seemed to favor the former. It was thought to be more desirable to have many titles available on microfilm for lending than it was to have a smaller number of titles in numerous exemplars in permanent collections, even though the cost per exemplar in the latter case might be lower.

A feeling was expressed that all schemes now in operation were too limited. There was no real need for the concentration of work or storage in any one place: efficient decentralization would be preferable. What was needed above everything else, it seemed to be felt, was a national plan under which libraries could work effectively together and duplication of effort be avoided.

Mr. Metcalf directed attention to the problem of fees for lending which he believed would have to be faced in any national plan; and he asked whether it would be better to have a library which wants to participate and have the privilege of borrowing pay a flat sum, or whether there might be gradation in terms of the size of a library and expected use of the borrowing privilege. No precise answer was given to this inquiry, and it appeared that the question of fees had not yet been thought through with clarity.

There were several suggestions that the pressing need of the moment was for a committee which might study the whole problem and make proposals. Upon motion by Mr. McCarthy it was voted that the executive secretary appoint, a committee to study and propose a national cooperative microfilm plan for newspapers and other serials (presumably foreign).

Library Privileges and Fees and a Proposed National Conference

Mr. Metcalf drew attention to an article by Carleton B. Joeckel which appeared in the California University Library News on November 26, 1952. It had dwelt on the dilemma of research libraries which are faced with rapidly rising costs and more and more inadequate resources, and commented upon proposals which have lately been put forward to institute a system of fees for library use. Finally, it proposed the calling, perhaps by the Association of Research Libraries, of a small and carefully selected conference of libraries

and other interested persons to consider some plan for the "greater equalization of research library facilities throughout the country."

For want of time the discussion of this topic was hurried and indecisive. Reconsideration at a later date would seem to be in order.

Cornell Microprint Project

Mr. Russell reported that Cornell had received a considerable grant from an industrial company to experiment with microreproduction or micropublication over a three year period. He asked for suggestions as to projects which might well be undertaken. Two suggestions were offered. One was the reproduction of early Colonial newspapers and of dissertations in the field of music; the other was experimentation with microreproduction on flat film in large format, say 8½ by 11 inches. It was pointed out that readers for such flat film would also require attention.

The chair observed that Mr. Russell would continue to welcome suggestions.

A Study of Cataloging Production

Felix Reichmann of Cornell, for the past several years deeply concerned with the difficult problem of adequate cataloging production, has reached the conclusion that since the middle of the last century great changes have occurred in the very structure of research libraries which call for as basic change in cataloging philosophy-a change which he feels is not yet fully realized and which requires fundamental study. As a means of emphasizing the problem he proposes that statistics of cataloging production be included hereafter in the "Princeton Statistics," and in the hope of finding a solution he urges that an ARL committee be appointed with the assignment of completely rewriting a catalog code for research libraries.

After a brief discussion it appeared that Mr. Reichmann's proposals were of such a nature that decisions were not to be thought of at the present meeting. He was accordingly requested to submit them in writing for inclusion in the minutes and later study.

Membership Requirements for Subscriptions to Journals Published by Professional Associations; and Excessive Prices Charged Libraries for Some Journals

Mr. Stanford spoke of the numerous memberships which the University of Minnesota Library maintains in professional associations in order to obtain their various bulletins, journals, proceedings, etc. He complained that these memberships sometimes involve institutional rates which carry membership privileges for university departments and faculty members "substantially in excess of the advertised cost of subscriptions as announced in the publications themselves" and that libraries are not permitted to subscribe at the advertised rates. He felt that the situation was becoming intolerable and that libraries might be forced to the subterfuge of obtaining such journals by having a faculty member enter individual subscriptions on behalf of the library—a course which he found "morally repugnant."

In the discussion which followed there were divided opinions. Many members evidently agreed with Mr. Stanford, but others pointed out that what appeared to be discriminatory charges to libraries were, at least in some cases, really "page charges," based on the amount of contributions carried in a journal from the faculty of a particular institution and that they were used in part to defray the cost of large numbers of reprints supplied to authors. It was noted that journal editors and managements have their financial problems too and that we were perhaps confronted with an inevitable changing pattern of publication which ought not to be opposed. Mr. Parker thought we might find that in some cases 90% of the subscriptions to a journal were from libraries. In such a case it might transpire that the limited number of individual subscribers carried at a special rate were in fact doing a favor to the libraries which must inevitably carry the principal burden.

On the whole it appeared that adequate information was lacking to reconcile the conflicting views which had been expressed. A committee to study the matter and report was therefore called for. On motion the matter was referred to the Committee on Serials in Research Fields, of which Charles H. Brown is chairman.

An Index of Pastor's "History of the Popes"

The Association has been asked by the director of the library of the Catholic University of America, a former member, to join with the American Historical Association and the Catholic Library Association in setting up a joint committee to work on the project of an index of Pastor's History of the Popes. It was agreed that Mr. David should be asked to represent the ARL in this matter.

Cooperative Committee on Microfilm Projects

Ben Powell, chairman of the above committee, which is a subcommittee of the ALA Board on Resources, presented for information a carefully considered report which it is hoped may in considerable part be published in College and Research Libraries. It is designed for the guidance of libraries which can spare a part of their resources for the support of a large-scale cooperative preservation microfilm program. It is designed to forward such a program while saving institutions from the waste of inadequately considered individual action.

Book Prices and Justifying the Book Budget

Mr. Coney reported that he has experienced increasing difficulty of late in justifying increasing demands which he has had to make in the book item in his budget. He illustrated the problem with two documents of which he has made use recently in presenting budget requests to his administration—his thought being that others might find them helpful and might in turn make helpful suggestions out of their own experience to him.

In discussion Mr. Coney noted that the rising cost of books was the element in the picture which he found it most difficult to present successfully, largely because there were no adequate factual data on the subject. Mr. David presented from the head of his Preparation Division some suggestions concerning possible sources of information on this subject. Miss Putnam, representing the University of Washington, offered to supply a summary of figures on rising costs which she had gathered out of her own acquisitions work. Mr. Clapp said he thought the Library of Congress would be able to supply from its records considerable data. Mr. Reichmann expressed an interest, based on his experience at Cornell. On motion it was voted that he be requested, with others cooperating in the supplying of information, to attempt to make a study of rising costs.

Election of a New Member of the Advisory Committee

Upon recommendation of the Nominating Committee, Vernon Tate of the Massachusetts Institute of Technology was elected a new member of the Advisory Committee to succeed the retiring member, James T. Babb of Yale.—Charles W. David, Executive Secretary pro tem.

Notes from the ACRL Office

During the spring your secretary took two extended trips into 12 eastern and southern states. One good reason for this field work is the direct order of the Board of Directors to do as much of this as practical. Behind Board action lies the belief that its secretary must keep in touch with libraries in order to work effectively, and that personal contacts make good public relations. This emphasis on travel is very much shared by Mr. Clift.

A good deal of trip time goes to ACRL business—an afternoon with our editor, Dr. Tauber, a morning with Mary Herrick (both a committee chairman and state representative), a full day with President Severance in Washington—but also included are a number of brief stops at institutions which have had little or no contact with the ACRL office.

A recent chance stop caused by a bus connection which left me several free hours on a Saturday morning was at Roanoke (Va.) College. Here I ran into a very unusual and interesting problem because the college planned to acquire a church property bordering the campus and to convert the church school building into a library. The mere mention is enough to make any conscientious librarian blanch, but in this instance the proposal looked fairly practical. The president, librarian and I went over plans very carefully. I learned a good deal and think the visit was not unappreciated by the college.

The Goucher College Library dedication was a grand opportunity to catch a great many librarians of eastern institutions and a thoroughly enjoyable affair. The papers presented there will probably come out as an ACRL Monograph. A chance remark disclosed the fact that the college was looking for a publisher of the two day proceedings.

In Athens, West Virginia, your secretary presided over the installation of Zeta chapter of Alpha Beta Alpha, the national undergraduate library science fraternity. Those who may raise an eyebrow at this sort of thing (as I used to do) are urged to see a chapter in action. In its short life, A.B.A. has been a very potent force in recruiting and gives promise of great usefulness in other fields as well.

One day in Birmingham, Alabama, included

visits to no less than five libraries in or near the city. The stops were shorter than desirable, but the contacts with librarians were enjoyable and the discussions useful in various ways. At Miles College, I found Miss Jenkins, fresh from Atlanta University Library School, attempting to carry on a positive, original program of library service with very limited book collection and other facilities. The new, Indian Springs School (private boarding school for boys) was operating the library as a real laboratory of the mind, and the whole student body was streaming out, bound for lunch, when we arrived. The library tables held a few typewriters which the boys could use at will.

One librarian commented that he was a member of another professional society and had never seen its staff members except at conferences, when they were busy with the arrangements. ALA made the effort to get out and around the country to explain its program and to learn what was needed.

At the Louisiana Library Association meeting in New Orleans, I spoke at a general session on the need for clear definition of the objectives and functions of libraries. The college sets the institutional objectives and the library must then define its proper functions in advancing the aims of the college. While most institutions have objectives in common, of course, considerable variation exists. Every library should be continually discussing, revising and publicizing its mission.

In larger libraries the various departments must be precise about their responsibilities and functions in advancing the common cause. For example, just exactly what are the principal functions of the catalog and the catalog department? Would everyone agree on a detailed analysis of the proper duties of reference? Can every professional staff member justify the emphasis of his daily work in the light of the proper functions of the library?

Even though the library functions are clearly stated, and the staff team-work excellent, how about students, alumni, friends of the college, or even the president's office? Cooperation from these areas is very, very important. Are the functions of the library sufficiently restated, posted and emphasized so that these groups never work at cross purposes to the library?

As an example, does your library recognize a responsibility to provide students with the non-textbook tools needed to supplement class-room instruction? If so, does it have sure and regular contact with all areas of classroom instruction so that it is certain about needs? Does it leave all this to the faculty or does it recognize a measure of human fallibility in some people which must be corrected by occasional visits of librarians to the classrooms to see for themselves?

In promoting worthwhile reading on campus, is the library emphasizing the objectives of the institution? Or is the library leaving the matter of reading habits entirely to faculty initiative? What is the respective importance of one function over another, and is this reflected in the use of professional time and funds?

No matter how pressed we are with daily routines, it is important that we take some time for reflection and unhurried discussion of objectives and functions. We should be sure we are headed in the right direction and that everyone who is interested knows a good deal about that direction. A library is too great an investment in staff, building, catalog and book collection to allow any measure of unplanned development.

Annual reports and library bulletins bring to this office a great deal of incidental intelligence which will be included here on occasion.

Kenyon College has a regular policy of giving book awards for course papers (regardless of field) which are distinguished above normal expectation.

The work of the ACRL Inter-Library Loan Committee was indirectly praised in the following, taken from the annual report of a leading eastern college:

Interlibrary loan procedures were changed to adopt use of what will become standard record form. A compact form in quadruplicate, it provides in one typing the work, notice, and filing forms for all operations of both libraries involved in a transaction. Used with window envelopes, it proved in a half year's usage to be excellent—changing interlibrary loan detail from a chore to a pleasure. Our blanket insurance coverage continued to aid in making interlibrary loans easier to handle mechanically, while the use of book bags saves enormous amounts of time and energy.

From Birmingham Southern College came the following comment, which should be considered in the light of articles on the same subject in this July issue:

To conserve space, the library is acquiring permanent periodical files on microfilm. Plans have already been made to purchase film for 60 of the 300 titles on the present subscription list, 1951-52. More of our subscription list will be purchased on film when available rather than continuing the former binding program. University Microfilms now offers some 700 journals on film and will expand the program as libraries respond to this solution to the storage problem.

The University of Illinois has studied the probem of library fines. About 5% of the material borrowed is kept longer than the prescribed period. Of this amount, two-thirds come back within a week and another 12% within the next week. Therefore, only one-half to one-percent of the borrowed material gave the staff serious recovery trouble. The library, therefore, decided to dispense with its regular two-cent a day fine and to follow present overdue notice policy. If a volume is overdue for more than two weeks, a fine of 25¢ per day is charged.

Fines are, or should be, a means to encourage compliance with rules or law and not for revenue. This is equally true of fines for speeding and fines for the return of books. A lot of small fines can be a considerable nuisance to both payer and payee, and make bad public relations for libraries. I know of several cases where similar action has been planned, and believe there is a trend toward the abolishment of petty fines and the strengthening of disciplinary action against borrowers (faculty or student) who are seriously irresponsible in meeting their obligations to the library.

Arthur T. Hamlin, Executive Secretary.

Outstanding Technical Publications

WELDING PRACTICE, edited by E. Fuchs, M.A. A.M.I. Mech. E. and H. Bradley, M. Met. Three volume reference work, prepared by Imperial Chemical Industries Ltd., a practical guide profusely illustrated with clear diagrams and photographs set \$8.50

Abridged list of contents:

Vol. I-WELDING METHODS AND TESTS. Welding Processes and their Applications, The Metallurgy of Welding, The Examination and Testing of Welds, Welding Equipment and Shop Layout, Welfare and Safety in Practice of Welding 130 pp. 71/2 x 10 illus.

Vol. II-WELDING OF FERROUS METALS, Mild Steel by the Metal Arc Process, Mild Steel by Processes other than the Metal Arc. High-Tensile Low-Alloy Steels, Chromium-nickel Austenitic Steels, Weld Details for Pressure Vessels, Cast Iron.

190 pp. 71/2 x 10 illus.

Vol. III-WELDING OF NON-FERROUS METALS. Copper, Brasses and Bronzes, Nickel and Nickelrich Allays, Silver, Aluminum and Aluminum Alloys, Lead, Brazing of Ferrous and Non-Ferrous Metals. 103 pp. 71/2 x 10 illus.

PHYSICAL CONSTANTS OF SOME COMMERCIAL STEELS AT ELEVATED TEMPERATURES, edited by the British Iron and Steel Research Association. Foreword by Ezer Griffiths, O.B.E., D.Sc., FRS

Reference tables, based on measurements made at the National Physical Laboratory, Teddington, from which the constants for a particular steel at a given temperature can easily be obtained. 38 pp. 9 x 111/4 diagrams, tables, charts,

spiral binding, \$3.00

COOLING TOWERS, by J. Jackson, B.Sc. The designing and testing of water-cooling towers, with special reference to mechanical draught sys-

104 pp. 5% x 9% photographs, line drawings, charts. \$3.50

ELECTRIC FUSES, by Dipl. Ing. H. Läpple. A critical review of published information on fuses, accenting the practical and commercial engineering aspects. 173 pp. 51/2 x 81/4 tables, charts.

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ACRL State Representatives

ACRL State Representatives have been appointed in nearly all states for the year 1953-54. Archie L. McNeal, director, the University of Miami Libraries (Coral Gables, Fla.), is national chairman of this group. State representatives are expected to act as spokesmen for ACRL in their areas: they will be kept informed. insofar as possible, of ACRL contacts with libraries in their areas. It is hoped that they will all be active in reporting state needs, state attitudes, and personnel recommended for committee assignments.

Ala.-Clyde H. Cantrell (A.P.I.)

Ariz. & N.M .- Donald M. Powell (Univ. of

Ark.-Georgia Clark (Univ.) Calif.-No appointment yet.

Colo. & Wyo.-Eugene H. Wilson (Univ. of Colo.)

Conn. & R.I.-Francis P. Allen (Univ. of R.I.) Del., Md., & D.C.-Dorothy Sinclair (Enoch Pratt)

Fla.-Stanley L. West (Univ.)

Ga .- W. P. Kellam (Univ.)

Hawaii-Carl Stroven (Univ.)

Ida, & Mont,-Miss Lesley M. Heathcote (Montana State)

Ill.-David Jolly (Northwestern)

Ind .- Miss Marion Grady (Ball State) Ia .- Robert W. Orr (Iowa State)

Kan .- No appointment yet.

Ky.-Evelyn J. Schneider (Univ. of Louisville)

La.-Eugene P. Watson (Northwestern State)

Me., N.H., & Vt.-Sidney B. Smith (Univ. of Vt.)

Mass .- Mary D. Herrick (Boston Univ.)

Mich.-Katharine M. Stokes (Western Mich.)

Minn.-David R. Watkins (Univ.)

Miss.—Donald E. Thompson (Miss. State) Mo.-Stuart Baillie (Washington Univ.)

Neb .- Frank A. Lundy (Univ.) Nev. & Utah-L. H. Kirkpatrick (Univ. of Utah)

N.J.-Mary V. Gaver (Trenton State Teachers)

N.Y., metro.-Ethel M. Feagley (Columbia T.C.)

N.Y., upstate-Eileen Thorton (Vassar)

N.C.-B. E. Powell (Duke Univ.)

N.D. & S.D.-H. Dean Stalling (N.D. Agri.)

Ohio-John B Nicholson, Jr. (Kent State)

Okla.-Edmon Low (Okla. A.M. Coll.) Ore.-Carl W. Hintz (Univ. of Ore.)

Pa .- (east) - Tilton M. Barron (Ursinus)

Pa.-(west)-Ralph W. McComb (Pa. State)

S.C.-Alfred Rawlinson (Univ.)

Tenn.-Ruth C. Ringo (Univ.)

Tex .- Robert M. Trent (Southern Methodist U.)

Va .- Miss Roy Land (Univ.)

W.Va.-Gilbert G. Fites, Jr. (Fairmont State)

Wis .- Gerhard B. Naeseth (Univ.)

News from the Field

Acquisitions, Gifts, Collections

The Oberlin College Library reached the 500,000 mark in bound volumes on March 21.

when the first volume of the Collected Works of Abraham Lincoln was added to its collection. The Lincoln volume was chosen for the 500,000 stamp from among a number of books on hand. It was selected because of Oberlin's close association in its early years with the anti-slavery movement. The ten volume work was published on Lincoln's birthday by the

Rutgers University Press.

The Dartmouth College Library on February 13 acquired its 700,000th volume with the gift of a Shakespeare Second Folio of 1632 from Donald L. Stone, professor of business law at the Amos Tuck School of Business Administration at Dartmouth. By this acquisition, the library now possesses all folio editions of Shakespeare except the very rare

First Folio of 1623.

Cornell University and the University of Virginia, represented by Mrs. Edith M. Fox, curator of the Cornell Collection of Regional History, and Dr. Francis L. Berkeley Jr., curator of manuscripts at the University of Virginia, have effected an interesting exchange. By the agreement, the University of Virginia's anti-Masonic material which had been gathered on the scene after 1827 by Dr. Samuel Bradley, a Mason in Monroe County, N. Y., was sent to New York, and Cornell's collection of petitions and "memorials" to the Virginia House of Delegates, dated 1776-82 and including letters by Thomas Jefferson and Patrick Henry, was returned to Virginia. The original donors of the two collections gladly agreed to the swap, because it meant that the documents were going home.

The papers of Harry A. Slattery, one-time Under-Secretary of the Interior and Administrator of the Rural Electrification Administration from 1939 until 1944, have been deposited by the family in the Duke University Library. In addition to the correspondence and files relating to Mr. Slattery's own career, this collection of approximately 25,000 items is rich in materials concerning the development of United States conservation policies from the days of Theodore Roosevelt until Mr. Slat-

tery retired from public life in 1944.

The Duke University Library has also acquired the Don Preston Peters Collection of manuscripts, a collection of over 15,000 items bearing on nearly every phase of life in the South during the eighteenth and nineteenth centuries. Of particular importance are several thousand papers concerning the early iron industry in Virginia. There is also much new material pertaining to the Civil War written by prominent ex-Confederates.

A special room in the library of Bethany College, Lindsborg, Kansas, has been designated as the Dr. Carl Swensson Room, as a memorial tribute to the founder of Bethany College. This room will house the Swedish collection which numbers some 4000 volumes and consists of Swedish history, literature, biography, etc. The entire collection is being re-cataloged to make it available for the use

of students and researchers.

A new fine arts reading room was opened last fall at the Chicago Undergraduate Division of the University of Illinois Library with the nucleus of a gift of 2000 volumes from the rich architectural library maintained for many years by the Chicago firm of Holabird and Root. The total holdings of this new divisional reading room now number 6000 volumes, 8000 stereopticon slides, and 40 current periodicals.

The Library of Congress has acquired the personal papers of Jacob A. Riis. The collection, comprising some 600 pieces, is in addition to a group of some 80 letters from Theodore Roosevelt to Riis already in the

Library.

The Library of Congress recently purchased the Feleky-Telkes Collection or, as it is also known, the Hungarian Reference Library, which comprises approximately 6600 books and 2600 pamphlets, about one-third of which are in the Hungarian language; files of newspapers, periodicals, and photographs; and some 10,000 articles extracted from more than 800 English-language periodicals on many phases of the Hungarian and Central European economic, political and cultural development.

The purchase of 40,000 new American books which the United Nations' Korean Reconstruction Agency is sending to nine Korean universities through CARE has been under

way since early spring. Shipments started in May. The recipient institutions include Seoul National University, Chun Puk University, Chun Nam University, Kyunpuk University, Chosun Christian University, Korea University, Pusan University, Ewha Women's University and Pusan Fisheries College. The resumption of service means that individual contributions can be sent to the Book Fund at any CARE office, or headquarters, 20 Broad St., New York 5, N.Y.

The Earlham College Library has received the papers of Elbert Russell, class of 1894 and professor of Biblical literature, 1895-1901 and 1903-1915, and later dean of the Divinity School, Duke University. The presentation was made by his wife Lieuetta Cox Russell and his son, Professor Josiah Cox Russell, class

of 1922.

The contents of these papers are quite varied and include the wide scope of the interest and activities of this important Biblical scholar and Quaker religious leader and his-

A new undergraduate library, Buildings and for which remodelling is in progress, is incorporating. Conferences and to some extent, replacing the two former reserve rooms at the University of Kansas Library. Undergraduate facilities, complete with new furnishings, will

occupy a convenient ground floor location, and should be ready for opening at the beginning of the fall semester. The plan of the undergraduate library is for an open stack collection of about 25,000 volumes, with only a small number of volumes to be retained behind the desk in a "closed reserve." preparation for this important service development, an extensive buying program, selectively aimed at undergraduate interest and needs, has been under way during the past year.

The plans for the construction of the Kelsey Memorial Library at Sterling College, Sterling, Kansas are progressing. The Board of Trustees approved the plans in March and the ground-breaking ceremonies were held in connection with the spring commencement activities

Dedication ceremonies for the new Agriculture Library at the University of Minnesota took place on January 14. Critical space problems that arose during the 1930's and the 1940's were solved by two legislative appropriations, and the building was completed in the summer of 1952.

"The College Library in a Changing World" was the theme of the conference at Goucher College, Towson, Maryland, on the occasion of the dedication of the Julia Rogers Library on April 10-11. Among the sessions participated in by librarians were discussions on the college library in the community and on books and freedom.

The Medical Indexing Project at the Welch Medical Library, the Johns Hopkins University, in cooperation with the Maryland Section of the American Chemical Society and the American Documentation Institute, sponsored a one-day symposium on "Machine Techniques in Scientific Documentation." Held in Baltimore on March 3, the conference attracted over 200 persons.

The first program meeting of the ACRL Philadelphia Chapter was held on February 17 at the Free Library of Philadelphia. Announcement of the election of chapter officers -this was the first such chapter formed in ACRL—was followed by a discussion of problems met in administering the reserve book room.

The Kansas Association of School Librarians and the Department of Library Science of the Emporia State Teachers College were joint sponsors of a library workshop on the Emporia campus from June 8 through June 19.

The Kansas Library Association sponsored three-day workshops for public librarians in April on the campuses of the three state schools: Emporia, Hays, and Pittsburg, at which the faculty members of the respective

schools did the teaching.

A Workshop on Technical Reports was held at the Catholic University of America, April 13-18. The workshop, attended by about 250 persons, was under the joint sponsorship of the American Documentation Institute, the Chemical Literature Section of the American Chemical Society, the Special Libraries Association, and the National Science Foundation. It is expected that the papers will be published.

The issuance of printed cards by the Vatican Li-Miscellaneous brary terminated with the 1946 series. In a letter dated October 3 to Eugene P. Willging, director of the Catholic University Library, the Reverend Arnold van Lantschoot, vice prefetto of the Vatican Library, reported that the last card issued was numbered 46-1275.

The International Library Council has announced that the subject for the competition for the fourth Sevensma Prize, to be awarded in 1955, will be "Union Catalogues-Structure and Organization of a Union Catalogue in Relation to its Utilization." According to the announcement, "The essay must analyse, for a given period, the kind of requests received by one or more regional or national union catalogues in relation to the character of the libraries included and that of the users." The author is expected to draw conclusions concerning the best structure and organization either of the catalogs studied or of union catalogs in general. The deadline for submitting entries is December 31, 1951. Further details about the competition may be obtained from the Secretariat of the International Federation of Library Associations, c/o Library of the United Nations, Geneva. Switzerland.

Publications

Books and Libraries at the University of Kansas is a new publication, volume 1, number 1 of which was issued

last December by Robert Vosper, director of libraries.

An annual Public Lectureship in Books and Bibliography was recently established at the University of Kansas. The first lecture was delivered on April 17, by Elmer Adler, noted typophile, author, editor and publisher.

. The Pennell Collection of Early Kansas Photographs has been acquired by the University of Kansas Library. Dating from about 1888, this unique collection of some 30,000 glass negatives records, with unparalleled completeness and accuracy, a cross section of the mid-western American scene, from army life at a cavalry post (Fort Riley), to the evolution of ladies' hats. At present 4400 prints have been made.

The University of Arizona Library is compiling an index to Arizona news in the Arizona Daily Star of Tucson. The index is being compiled on a current basis beginning with January 1, 1953. With the cooperation of the Star it is hoped to mimeograph the index at the end of the year, and to distribute

copies to Arizona libraries and to a few other

The University of Utah Library has been microfilming back files of all the weekly newspapers in the state. Unfortunately, most of the papers published in Utah prior to 1900 have completely disappeared. Libraries may secure positive copies from the University of Utah Library at 1½ cents a page. If several titles are ordered at once a slightly lower rate may be possible. The University Library is also now receiving films of all the weekly newspapers at the end of each year.

A bibliography of the Widtsoe Collection on Mormon and Utah history at the University of Utah is in preparation. It will be arranged under subject headings worked out at the University, and an expanded decimal classification for the Mormons is also included. The volume will be available by purchase and on exchange.

The Journal of Discourses, which includes the various talks given to Mormon conferences in Utah from 1850 to about 1876, is now available on microfilm and can be purchased from the Deseret Book Company in Salt Lake City, Utah.

Penguin Books Inc., 3300 Clepper Mill Road, Baltimore, Maryland, has issued a revised listing of Penguin and Pelican books. Copies are available on card or paper. The books are inexpensively priced.

Documentation, Inc., 1830 Jefferson Place, N.W., Washington 6, D.C., will issue this summer the first volume of a new series, Studies in Coordinate Indexing. It will include the following papers: The Theory and Practice of Documentation; Functional Approach to Bibliographic Organization; A Critique and a Proposal; Specificity in Subject Headings and Coordinate Indexing; Unit Terms in Coordinate Indexing; The Logical Structure of Coordinate Indexing; Alphabetic Subject Indexes and Coordinate Subject Indexes: An Experimental Comparison; The Choice of Unit Terms for a Coordinate Index of Scientific and Technical Reports; Substitutes for the Card Catalog; Classification and Categorization in Information Systems; and The Evaluation of Information Systems. The volume is priced at \$3.00; prepublication orders are \$2.50.

North Carolina Authors: A Selective Handbook is a recent publication of the Library Extension Department of the University of

North Carolina Library. (Chapel Hill, 1952. xv, 136p. \$1.50 paper, \$3.00 cloth). Prepared by a Joint Committee of the North Carolina English Teachers Association and the North Carolina Library Association, the handbook is designed to fill a need for a reference book about North Carolina writers for the use principally of teachers and librarians. Limited to authors whose work has been mostly literary, the handbook includes accounts of more than 160 authors, living and dead. Each biographical sketch includes an account of the writer and his work, a list of his writings, and selected references where further information may be found. Sketches are signed except for the more than 82 autobiographical accounts submitted by living writers. While not all librarians will agree with the selections included or omitted, the handbook provides a ready reference source for information on many North Carolina authors not easily found in other standard sources,

The December, 1952, issue of the Journal of Cataloging and Classification contains the papers which were presented at the symposium on subject headings, July 1-2, at the ALA Division of Cataloging and Classifica-

tion meetings in New York.

Crete: A Case Study of an Undeveloped Area, by Leland G. Allbaugh, has been issued by the Princeton University Press (1953, 572p., maps, \$7.50). This is a report of a study carried out by the Rockefeller Foundation in an effort to discover what kinds of assistance can be usefully given to undeveloped areas.

George Williamson is the author of A Reader's Guide to T. S. Eliot (New York, Noonday Press, 1953, 240p. \$3.50). This is a poem-by-poem analysis designed to clarify the structure and meaning of Eliot's works. The volume contains an "Index of Poems."

Painting, music, theatre, dance, literature, sculpture and architecture are all treated in 7 Arts, an unusual paper-bound anthology of articles from leaders in the seven major arts. Edited by Fernando Puma, it includes contributions by Thomas Mann, William Carlos Williams, Frank Lloyd Wright and others (New York, Permabooks, 1953, 210p. illus., \$.50).

Finnegans Wake by James Joyce: A Check List, compiled by James Fuller Spoeri, has been issued by the Northwestern University Library (Evanston, 1953, 19p.).

Copies of Clue, the student handbook of the Brooklyn College Library, may be obtained by writing to Mrs. Rose Z. Sellers, chief special services librarian, Brooklyn College Library, Brooklyn 10, N.Y.

Dr. Carl Björkbom, librarian, Royal Institute of Technology, Stockholm, is the compiler of a mimeographed "List of Swedish Technical Periodicals" (Stockholm 3, The

Swedish Institute, 1953, 15p.).

Keyes D. Metcalf and Edwin E. Williams are the authors of "The Administrative Structure of the Harvard University Library," in the Harvard Library Bulletin, Winter 1953. Foster R. Palmer has an article on "The Reference Section in the Harvard College

Library" in this issue.

Guy R. Lyle, director of Louisiana State University Libraries, and H. Tatnall Brown, Jr. have prepared A Bibliography of Christopher Morley (Washington, D. C., The Scarecrow Press, 1952, 198p., \$4.00). The volume contains the following lists: books and pamphlets, ephemeral publications, books containing contributions by Morley, books containing material about Morley, periodical articles by Morley, and periodical material about Morley. Bibliographical description is full for first editions and the more important pamphlets, and the arrangement is chronological by date of publication for all writings except the ephemeral publications, which are listed alphabetically by title.

Stillman K. Taylor, Gary Public Library, is the author of "A Survey of the Adult Department of the Racine Public Library,"

(Racine, Wis., 1953, 25p., \$2.00).

An Exhibition List of Works Selected from the DeGolyer Collection in the History of Science and Technology, shown at the University of Oklahoma Library, February 2-14, 1953, has been issued.

A. Stan Rescoe of the faculty of the library school at the George Peabody College for Teachers, is the compiler of "Technical Processes," a mimeographed manual interpreting the 1949 rules for cataloging and classification according to the ALA and the Library of Congress, with card forms to illustrate each rule (Nashville, 1952, 175, xxxvp.).

Paul Bixler is the author of "Heart of the College," *Antioch Notes*, Vol. 30, no. 4, December 1, 1952.

V 1934

Know Your Library is a new guide to re-

sources and services issued for users of the Air University Library, Maxwell Air Force Base, Alabama.

The World Publishing Company, Cleveland and New York, has issued its 1953 edition of the College Edition of Webster's New World Dictionary of the American Language (1953, xxxvi, 1724p., \$5.00 or \$6.00, thumbindexed). Based on and including material from the Encyclopedic Edition of Webster's New World Dictionary, the College Edition contains over 140,000 words, including idiomatic expressions, colloquialisms, and slang. Names of places and of notable persons, foreign expressions, abbreviations, etc. appear in the main body of the book, rather than in appendixes. The volume, which contains over 1200 illustrations, is in a type and format which is both attractive and readable.

Haynes McMullen is the author of "Administration of the University of Chicago Libraries, 1910-1928," in the Library Quarterly for January, 1953. In the same issue Rolland Stevens writes of "The Use of Library Materials in Doctoral Research: A Study of the Effect of Differences in Research

Method.

No. 1X of Unesco and Its Programme, a series of pamphlets about Unesco, is entitled Access to Books (1952, 23p., \$.20, order from Columbia University Press, New York.)

Kenneth J. LaBudde, director of libraries, University of Kansas City, is the author of "Faculty Status of College Librarians in Missouri," Missouri Library Association Quar-

terly, December, 1952.

The Library of Congress has published War and Postwar Greece, an analysis of conditions in Greece based on contemporary Greek literature, by Floyd A. Spencer, consultant (1952, 175p., \$1.15, order from Card Division).

Unesco has issued Theses in the Social Sciences: An International Analytical Catalogue of Unpublished Doctorate Theses, 1940-1950 (1952, 236p., \$1.25, order from Colum-

bia University Press, New York).

The Yale Daily News has published Seventy-Five, A Study of a Generation in Transition, in connection with its 75th anniversary (New Haven, 1953, 212p., \$2.00, bound, \$4.00). The volume, which consists of separate papers by various individuals, is divided into four parts: I, Higher Education at Yale; II, The Yale Man; III, The Yale Man and the Post-War 'Condition'; and IV. The Yale Pioneers and Their Challenge.

The major role in international affairs which the United States is now playing continues to be reflected in the work of the Library of Congress. In the Annual Report of the Librarian of Congress for the Fiscal Year Ending June 30, 1952 (Superintendent of Documents, \$2.25), a chapter on "Cooperative Bibliographical Projects" appears for the first time, summarizing the Library's participation in both national and international attempts at bibliographic control. A section on "External Relations," a part of the Report for the first time in 1950, reappears and serves to underline the importance of this phase of the Library's activity, in which it is frequently the major representative abroad of the profession in this country. The Report turns also to the internal organization of the Library and traces the development of the Serial Record, the means by which control is sought over the 2,000,000 serial items which are received annually. The figures given for the collections indicate some 31,000,000 items now in the library, of which 9,500,000 are volumes and pamphlets.

The 19th edition of Doctoral Dissertations Accepted by American Universities: 1951-1952, compiled by Arnold H. Trotier and Marian Harman, has been published by the H. W. Wilson Co. (269p., \$5.00). The new volume lists a total of 7661 theses, a number exceeding last year's total by 184 and the pre-

vious year's by 1151.

The Yale University Library has the following publications available for sale: The Journal of John Udell (\$4.00); The William Robertson Coe Collection of Western Americana, by Edward Eberstadt (\$3.00); A Stevenson Library, compiled by George L. McKay. (\$10.00 each); and The Scroll of Antiochus (\$4.00). Available from the Yale University Press is the following: A Catalogue of Manuscripts in the Collection of Western Americana Founded by William Robertson Coe. Yale University Library. Compiled by Mary C. Withington (\$10.00).

The Actes for the 18th session of the International Library Committee, held in Copenhagen, September 25-27, 1952, have recently appeared. In addition to the records of the meetings, the volume contains the revised statutes of the International Federation of Library Associations. One of the changes

made is in the name of the executive body of the association, which is now to be known as the International Library Council. Included in the annexes to the Actes are reports by L. Brummel on international library loans and on union catalogs, by J. H. P. Pafford on visits and exchanges of librarians, and by Mme. Suzanne Briet on the education of librarians and documentalists. The 1953 session of the Council was held in Vienna, June 10-13.

Henry Schuman, Inc., 20 E. 70th St., New York City 21, is now issuing Schuman's College Paper Backs, a series of brief historical studies. Priced at \$1.00 each, the first five titles are: What is History? and Social Evolution (both by V. Gordon Childe), From Savagery to Civilization, by Grahame Clark, The Decline of the Roman Empire in the West, by Frank W. Walbank, and Feudal Order, by Marion Gibbs.

Two new titles in The Life, Literature and Thought Library series of Barnes & Noble are Elizabethan Lyrics: A Critical Anthology, edited by Kenneth Muir, and English Pastoral Poetry, from the Beginnings to Marvell, edited by Frank Kermode. Each is priced at \$2.50.

The tenth in a series of publications planned to help fill the gaps in American information on Iron-Curtain Europe is Mid-Europe: A Selective Bibliography, compiled by Dr. Jirina Sztachova, issued by the Mid-European Studies Center of the National Committee for a Free Europe, Inc.

ACRL Monographs

Publication is announced of the following: #8. Bibliographical Style Manuals: a Guide to their Use in Documentation and Research, by Mary R. Kinney, assoc. prof. of Library Science at Simmons College (price 60¢). This will be of special importance to librarians giving instruction in the use of the library, doing reference work, and to all people doing research work in libraries or scholarly writing. It has particular usefulness to special librarians and documentalists.

#9. A Recommended List of Basic Periodicals in Engineering and the Engineering Sciences, prepared by a special committee of the ACRL Pure and Applied Science Section under the chairmanship of William H. Hyde, librarian and professor of Library Science at the Illinois Institute of Technology (price

75¢). This highly selective list is designed to strike a middle ground between the needs for undergraduate work and the specialist in industry. It should be useful to all libraries with any engineering interests, whether public, college of industrial. For some libraries, it will serve as a buying guide and for others as a basic list to check against holdings.

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July Issue C&RL

CSRL for July goes to 1952 ACRL members whether or not they have rejoined for 1953. It is hoped that nearly every member of last year will want to be included, and we don't want to miss anyone because he is late in forwarding his dues.

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Personnel

ROBERT W. SEVERANCE, president of the Association of College and Reference Libraries, became deputy director of the Army



Major Severance

Library in the Pentagon at the end of March. In so doing Major Severance reverted to inactive in the Air status Force, where he had been serving for two years as information services officer at the Resources Human Center. Research Lackland Air Force Base, San Antonio,

Texas. He also resigned his position as director of the Baylor University Library, which he has held since 1940.

Born in Florence, South Carolina in 1907. President Severance received his B.A. from Furman in 1928 and M.A. from the University of Virginia in 1929. After two years of teaching history at Judson College he went to George Peabody College for his B.S. in L.S. He served on the staffs of the Lawson McGhee Library (Knoxville) and North Carolina State College Library (Raleigh), before he became librarian and professor of library science at John B. Stetson University DeLand. Florida, in 1936. He left this position in 1940 to go to Baylor. He served in the Army Air Force during the war and is a Fellow in the Royal Society of Arts (British).

Mr. Severance is a past president of the Florida Library Association and the Texas Library Association and has served in numerous other capacities in these associations as well as the American Library Association and ACRL. He is a past editor of the Texas Library Journal and has been active in the American Association of University Professors. He has three children, all of whom are graduating from school this year (one each from grammar school, junior high, and high school). Also, if you please, Mrs. Severance will be in cap and gown for a second M.A. Consuming personal interests are golf, camping trips, and a very complete collection of editions of Samuel Butler's Hudibras.

To his new position Mr. Severance brings experience in military needs and methods, a sound knowledge of research library operations, and a very unusual background of leadership in state and national professional circles. The Pentagon library has in the past ten years become an important part of national defense. Those who know Bob only by reputation will be pleased that one of his professional attainments has accepted this responsibility; those of us who have in one way or another worked with him will feel that the Army has done extraordinarily well in filling this position. His sound professional judgment, tact, analytical powers, sense of responsibility, and warm, human heart combine to win the respect of all and the devotion of those who work under him.-Arthur T. Hamlin.

Dr. Andrew Eaton, formerly associate director of libraries at Louisiana State University, is now director of libraries, Washington University, St. Louis.

Dr. Eaton served six years at L. S. U. as associate director of libraries and one year as chief reference librarian. Previously he



Andrew Eaton

held positions in the Rochester Public Library and the Lawrence College Library. Dr. Eaton is a graduate of the College of Wooster (A.B., 1935), of the University of Michigan Library School (A.B.L.S., 1936), and of the Graduate Library School of the University of Chicago

(Ph.D., 1944). In addition to serving as administrator of branch libraries and assisting the director of libraries in studying library research needs, he edited Newspaper Files in the Louisiana State University Library (1947) and List of Scientific and Technical Serials in Louisiana State University Library (1949), and has had over-all charge of developing the library's program of filming Louisiana newspapers. This program is described by Dr. Eaton in some detail in a recent article en-

titled "Toward a State-Wide Newspaper Microfilming Program" (College and Re-

search Libraries, January, 1953).

During summer sessions Dr. Eaton has taught in library schools at Columbia University (1947), at Florida State University (1948), Louisiana State University Library School (1949), and the University of North Carolina (1952). During the past year, he served as chairman of the Louisiana State University Press Committee. He has also served as a member of the important Board on Resources of American Libraries (American Library Association), the executive board of the Louisiana Library Association, the board of directors of the Association of College and Reference Libraries, and the Council of the American Library Association.

Dr. Eaton has made a splendid record at L. S. U. The library staff wishes him and his family continued success and happiness in

his new position.-Guy R. Lyle.

On April 1, 1953, Dr. Hensley C. Woodbridge, formerly of the reference department of the Alabama Polytechnic Institute, became head librarian of Murray State College at Murray, Kentucky. Dr. Woodbridge received his A.B. at the College of William and Mary in 1943, his Ph.D. in Romance Languages from the University of Illinois in 1950, and his M.S. in L.S. from the University of Illinois in 1951. He brings to Murray a valuable background of research in Hispanic philology, and he has published several articles, reviews, and bibliographies of significance in Italica, Hispania, Modern Language Journal, Library Quarterly, Books Abroad, Romanic Review, and other scholarly journals. Dr. Woodbridge's new associates at Murray will find that he combines a keen sense of humor with his competence as a librarian and a scholar. and he is a profound believer in the humane tradition of librarianship .- Lawrence S. Thompson

Appointments

Ruth Babcock is serials librarian of the University of Washington.

James G. Baker, formerly assistant director and head of the catalog department, Alabama Polytechnic Institute Library, is now chief of the catalog and order departments of the Arnold Engineering Development Center, Tullahoma, Tennessee.

Rose Boots is professorial lecturer at the Pratt Institute Library School, where she will teach the course in special libraries.

Mrs. Annie Louise Bowman is appointed reference librarian of the Virginia Polytechnic Institute.

Mrs. Enid Parker Bryan is librarian of Shorter College, Rome, Georgia.

Mildred W. Davis is periodical librarian of the University of Mississippi Library.

Arthur S. Devolder is head of the circulation department of the University of Oregon Library.

Jeanette H. Foster, formerly librarian of Indiana University's Institute for Sex Research, is reference librarian at the University of Kansas City.

Ralph H. Hopp is assistant director for administration and readers services, University of Minnesota Library.

Wayne K. Howell, formerly head of the circulation department, Alabama Polytechnic Institute Library, is now with the Audio-Visual Department of the Western Illinois Teachers College, Macomb.

The following staff changes have been made in the University of Kansas Library: Kay Ewart is head of the undergraduate library services; John Glinka is head of the newly organized preparations department; Joyce McLeod is head of the reference department; Robert M. Mengel is special bibliographer in the Ralph M. Ellis Collection of Ornithology and Rare Books; John M. Nugent is head of the circulation department; and, Robert L. Quinsey is chief of reader service.

James Victor Jones is now assistant director of libraries. St. Louis University.

Hilda G. Kolpin is librarian of Susquehanna University, Selinsgrove, Pennsylvania. Clayton D. Loughran is librarian of the

Clayton D. Loughran is librarian of the Institute of Languages and Linguistics of Georgetown University.

Samuel Marino, formerly serials librarian of Alabama Polytechnic Institute, is assistant director of the University of Mississippi Library.

John David Marshall is reference librarian at Clemson College.

Jay Monaghan is consultant for 1953 to the endowed Wyles Collection on Lincoln, the

Civil War, and American expansion at Santa Barbara College of the University of California.

David Lewis Moore is assistant librarian in charge of the Carnegie Endowment Collection, George Washington University Library.

Velva Jeanne Osborn is counselor librarian in the Department of Library Instruction and Advisement at the University of Illinois, Chicago Undergraduate Division,

William Powell is librarian of the Pasadena (California) College Library.

Doris Ransom, formerly of the Copyright Cataloging Division of the Library of Congress, is assistant catalog librarian at Oregon State College.

Elizabeth L. Read is reclassification librarian of the University of Mississippi.

J. Mitchell Reames, formerly reference librarian at Clemson College, is assistant librarian in charge of readers' services, Northwestern State College, Natchitoches, Louisiana.

Benton F. Scheide, formerly assistant circulation librarian at Oregon State College, is head circulation librarian of the Alabama

Polytechnic Institute.

Joseph M. Simmons is assistant acquisitions librarian at Oregon State College.

George Smisor is order librarian of the University of California Library, Riverside, California.

Emma C. F. Smith is reference librarian of Duquesne University in Pittsburgh, Pennsylvania.

Joseph Sprug, head of the catalog department of the Mullen Library, Catholic University of America, is on leave to serve as editor of the Catholic Periodical Index.

Alice Tanner is law librarian of the University of Kansas City.

Warren M. Tsuneishi is curator of the Far Eastern Collection of the Yale University Librarian.

David R. Watkins, formerly librarian of the College of St. Thomas, is principal librarian, reference department, University of Minnesota Library.

David H. Webb is instructor, University of Chicago Graduate Library School.

Joyce Wright is librarian of Reed College, Portland, Ore.

Retirements

LeNoir Dimmitt, director of the University of Texas Extension Loan Library from 1917 to 1951, has recently retired.

Necrology

Suda Lorena Bane, archivist of the Herbert Hoover archives in the Hoover Institute and Library of Stanford University, died on November 19, 1952 at the age of 66.

Herbert Eugene Bolton, director of the Bancroft Library of the University of California at Berkeley from 1916 to 1940, died on January 30, 1953 at the age of 83.

Pierce Butler, professor emeritus in the Graduate Library School at the University of Chicago, died on March 28, 1953, as the result of injuries received in an automobile accident near Burlington, North Carolina, on March 26. Also killed in the same accident was George F. Bentley, assistant to the librarian of the University of North Carolina. The car, driven by Mr. Bentley, was involved in a collision with a tractor truck.

At the time of his death, Dr. Butler was visiting professor in the University of North Carolina School of Library Science for the spring quarter. A special issue in his honor of the Library Quarterly, including a biographical sketch by Stanley Pargellis, was published in July, 1952.

Phyllis Carroll, senior reference assistant who was on leave from the Columbia College Library, died at her home in Hartford, Conn., November 13, 1952, after a long illness.

Henry Fickus, director of research at the Peabody Library, Baltimore, died on December 22, 1952. Mr. Fickus had been connected with the library for thirty-nine years.

Andrew Keogh, librarian of Yale University from 1916 to 1938, died on February 14, 1953, at the age of 84.

Mrs. Josephine Golden Morton, librarian of the Howard University Medical School, died on October 19, 1952.

Louise Ophüls, librarian of the Lane Medical Library of Stanford University until 1939, died on January 16, 1953.

Henry Spaulding Parsons, who retired as chief of the Serials Division of the Library of Congress in 1947, died on November 21, 1952, at the age of 75.

Foreign Libraries

Francesco Barberi, secretary of the Italian Association for Libraries and formerly director of the Biblioteca Angelica, has been appointed Inspector of State Libraries in the Italian Ministry of Public Instruction.

Giorgio De Gregori, treasurer of the Italian Association for Libraries, was recently appointed Soprintendente alle Biblioteche for the provinces of Abruzzo and Molise in Pescara.

On September 1, 1952 Eric Holmberg retired as librarian of Abo Akademi.

William Kaye Lamb, Dominion Archivist

since 1948, has been appointed National Librarian of Canada. Raymond Tanghe, librarian of the University of Montreal, has been appointed assistant librarian.

Gina Risoldi, formerly assistant director of the University of Bologna Library, has been appointed Soprintendente alle Biblioteche for the provinces of Bologna, Romagna, and Marche.

Anna Saitta, formerly director of the Biblioteca Marucelliana in Florence, has been appointed director of the Biblioteca Angelica in Rome.

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Review Articles

Books About Books

English Books & Readers, 1475 to 1557. Being a study in history of the book trade from Caxton to the incorporation of the Stationers' Company. By H. S. Bennett. Cambridge, The University Press, 1952. \$7.00. Samuel Richardson: Master Printer. By Wil-

liam M. Sale, Jr. Ithaca, N.Y., Cornell University Press, 1950. \$5.00.

Papermaking in Pioneer America. By Dard Hunter. Philadelphia, The University of Pennsylvania Press, 1952. \$6.50.

A Bibliography of Canadian Imprints, 1751-1800. By Marie Tremaine. Toronto, University of Toronto Press, 1952. \$10.00.

Books and Printing: A Treasury for Typophiles. By Paul A. Bennett. Cleveland & New York. The World Publishing Company, 1951. 417p., \$7.50.

In some of the review articles which I have contributed from time to time to CGRL, continental books have been given a good deal of attention. This was a natural result of long years of interrupted communication caused by the second World War. It was important to trace the course of continental European bibliographical and book arts studies during and after the war and to reestablish the broken links of cultural intercourse. In these matters we have now returned to nearly normal conditions.

No special effort was necessary to collect for the purpose of the present review a number of interesting publications dealing with the English and American tradition in bookmaking. They formed a natural group in which one or two titles of not quite so recent vintage found their proper place.

The Cambridge University Press has been especially active in the field, producing a number of publications which promise to become permanently valuable additions to the bibliographical reference shelf of the scholarly library.

H. S. Bennett's English Books & Readers is a work which contains an astonishing amount of information, most of it never before combined into a coherent unit. The strength of this book lies in the newness of the author's approach, his inquisitiveness about the reasons

why printed books came into being in England; what caused them to be written in the first place; how they got selected for publication; what the role of the patron was in this process; what the author got out of it; what social classes the readers of various types of printed books belonged to and what their education was; whether Church and State hindered or encouraged the booktrade and how and why; and many other related major and minor questions.

The weakness of the book, it seems to me, is a result-and perhaps an inevitable one-of its strength. It stems from Mr. Bennett's concentration upon the British scene. It is probable that the student of English literature and the bibliographer specializing in English books and printing will hardly miss references to the continental scene. But if one is interested in the whole aspect of Western book history, in the gradual unfolding of the powers of the press and in the changes which printing effected in Western culture, then one misses something in this book. There are many points in English Books & Readers which invite comparison with conditions in France and the Netherlands, with Germany and Italy. Only through comparison would it be possible to see clearly at which date and in terms of what issues the English book trade ceased to follow continental precedence and took the lead in its own characteristic way. But one thing is certain: Mr. Bennett's thorough work has furnished a solid basis for this kind of evaluation to be undertaken in the future.

English Books & Readers makes excellent use of previously published studies, integrating the material in a fresh and convincing manner. The main new source of information are the Forewords, Introductions, Dedicatory Epistles and other "Front Matter." found in the early books themselves. These are studied, commented upon and quoted in such a way as to bring into this work a sustaining element of authenticity and immediate contact with the lives and times of the early English writers, printers, publishers, patrons and readers. There are appendices of considerable extent and usefulness: a "Handlist of Publications by Wynkyn de Worde, 1492-1535"; a "Trial List of Translations into English printed

between 1475-1560"; a "Bibliography" and a "General Index."

At least passing reference should be made to two other Cambridge publications, each of them dealing with a more specialized aspect of book production in England: J. Basil Oldham's English Blind-Stamped Bindings, 1952 (\$27.50), in which the librarian of Shrewsbury School describes "many new groups of bindings that may be attributed to particular craftsmen or binderies" and for which he devises his own method of ornament classification and description, a system that may well prove adaptable to other schools and other countries: and Arthur M. Hind's Engraving in England in the Sixteenth & Seventeenth Centuries. 1952, of which Part I. The Tudor Period. has so far been issued.

Perhaps the greatest importance of these two publications will be their contribution to the question, why England did not enjoy equality of rank in the graphic arts with other European countries from the 14th to the end of the 17th century. It is generally recognized that the eighteenth century restored the balance and saw once more leadership in certain branches. We are well informed on the contribution to English graphic art of such figures as Caslon, Baskerville and Bell, of Hogarth and Blake, and of the English university presses. But the contribution of the individual printer of books in this century has not been too clearly underlined by monographic treatment.

When we take up Professor William M. Shale's study of Samuel Richardson: Master Printer, we wonder why such rich material has had to lie unused and unobserved for so long. This does not mean that it was all on the surface and ready to be gathered in by anyone who happened to come along. A key was needed to open this treasure house of information. In the case of Richardson this key was in the hands of the Professor of English at Cornell. He knew Richardson the novelist, but was searching for Richardson the man. This was the quest that led to Richardson the printer.

Professor Shale started with the knowledge of his fiction which "shows his extraordinary awareness of class differences, his sensitiveness to human problems that arise from the interpenetration of classes. . . . If we are ever to see more clearly the meaning that his fiction had for his own century and that it may have for ours, we must see more clearly how his fiction rendered the conflicts he saw in his own society. We cannot gain this knowledge, however, by divorcing the man from those activities that were the major preoccupation of his life."

Richardson's career as a printer is set forth in this book with thoroughness and precision. It is not a straight annotated biography, fortunately, but a systematic concentration of the facts around a number of focal points. Each of these illuminates a specific aspect of Richardson's position in the world and his relationship to the society in which he lived: His activities as a printer of periodicals, his government contracts, his work for the king, relationships with the trade, and with the people who worked for him over the years.

A substantial portion of the nearly 400 pages of the book are taken up with lists and appendices. Chapter VIII contains "A List of Books printed by Richardson," both in alphabetical and in chronological arrangement, a total of no less than 516 titles. Chapter X is "A List of Book-sellers Whom Richardson Printed." There is also a list of "Richardson's Apprentices," "A List of the Law Patentees," "Notes" and "Index."

Special attention is paid to the ornaments used by Richardson, because they proved the most reliable means of identifying the products of Richardson's printing office. The occurrence and condition of these ornaments is traced with the most meticulous care and the question of unauthorized recutting is carefully considered. New bibliographical territory is explored here and it is not an exaggeration to say that this book is an important pioneer work in the identification of 18th century imprints.

During Richardson's lifetime American printing and bookmaking were advancing steadily on the road towards greater independence and self-reliance. When Richardson printed his first book in London in 1719, most American printers still had to import their paper from England. Only in Pennsylvania was domeatic paper obtainable. By the time the last books issued from Richardson's press in 1762, papermaking had started in New Jersey, Massachusetts, Maine and Virginia.

Dard Hunter's Papermaking in Pioneer America is the source for this and every other kind of information about the beginnings of this important industry. The book is based on the lectures which Dard Hunter delivered as Rosenbach Fellow in Bibliography, which in turn were built from materials gathered by him for many years for a large folio volume on the subject. The present book will be welcomed by many as a compact, handsomely printed and illustrated (and reasonably priced) introduction to the subject of papermaking in America.

During the lifetime of Samuel Richardson there occurred another significant step in the growth of the printing press in the North American colonies: the beginning of printing in Canada, marked by the establishment in 1751 of a small press in Halifax by Bartholomew Green of Boston. From that time until the end of the 18th century, sixteen printing offices were operating in Canada, and of these nine were still functioning by 1800. A few years less than twenty years ago Marie Tremaine started a study of Canadian life towards the end of the 18th century. The ultimate consequence of these interests lies now before us in the form of the most impressive A Bibliography of Canadian Imprints, 1751-1800. A brief, but skilfully written Introduction summarizes the nature of early Canadian printing; from which it becomes apparent "that the staple product of the earliest Canadian presses, as of colonial presses elsewhere, were newspapers, almanacs, law and legislative publications, handbills, printed forms, and those kinds of educational and religious publications for which there was a substantial market.

The Bibliography is organized in two groups, one of them "imprints," which includes books, pamphlets and broadsides, arranged chronologically by years, and alphabetically within each year. There are no less than 1204 items in this group, which includes not only publications now extant but also those which are recorded in some source as having been issued. The facts for their inclusion is always carefully explained. It will be inevitable that avid collectors of Canadiana will forever onward hope for the discovery and acquisition of some of these elusive items.

The products of the periodical press, newspapers primarily, form the second (and much smaller) group in the Bibliography of Canadian Imprints. The items are described in great detail and with what appears to be admirable care. The bibliography of Americana has undoubtedly received a very significant addition through the publication of this

important volume which was most certainly a labor of devoted love.

In conclusion there should be a reference in this article to at least one publication dealing with current matters. It is easy to be enthusiastic about Paul Bennett's Books and Printing: A Treasury for Typophiles, because this book, which appeared in 1951, has had time to prove its worth. It was reviewed at some length in the October 1952, issue of College and Research Libraries by Edward C. Lathem. In my own experience as a teacher of graphic arts I found it most useful in giving a lively, many-sided and colorful insight into the methods and processes not only, but also the thoughts and beliefs behind the procedures by which books are built today. The book is "simply" a collection of shorter articles or pamphlets, each of them by a different printer, designer, illustrator, commentator or historian or critic, whose piece attracted attention at the time of its first appearance and was judged fit to be reread by the editor. With very few exceptions his judgement was sound. Books and Printing, which looks very little like a textbook is, nevertheless, an excellent textbook in the good sense of the word.-Hellmut Lehmann-Haupt, New York, N.Y.

Militant Liberal

R. R. Bowker: Militant Liberal. By E. Mc-Clung Fleming. Introduction by Allan Nevins. Norman, University of Oklahoma Press, 1952. xv, 395p. \$5.00.

When Richard Rogers Bowker died in 1933 at the age of 85, the editor of the American Book Collector wrote that Bowker's life was "perhaps more closely interwoven with books anyone else's now living." R. R. Bowker: Militant Liberal, E. McClung Fleming, dean of the College at Park College, Parkville, Missouri, has vividly portrayed the life of this man perhaps unknown to most reading Americans but to whom they are much indebted. Bowker was for 50 years the director of Publishers' Weekly; he was a founder of the American Library Association and the Library Journal. His work in the cause of international copyright is notable and his contributions to American bibliography of inestimable value. Librarians are much in Bowker's debt, and they particularly will find Dr. Fleming's book of much interest.

Bookman par excellence was Bowker. His other interests, however, were numerous and varied; and he used his facile pen to focus America's attention on those causes in which he believed so firmly. He was a strong advocate of civil service reform, free trade, and anti-imperialism. He was a leader in the campaign of 1884 to elect Grover Cleveland President of the United States. He fought Tammany Hall in New York local politics with zeal and not a little success. In addition, Bowker was a successful industrial executive, serving as general manager and vice-president of the Edison Electric Illuminating Company of New York from 1800 to 1808.

Education and the role of libraries in the educative process were consuming interests of Bowker. On one occasion he declared, "The library and the school together make the safeguards of America." A graduate of the College of the City of New York, Bowker maintained an active interest in the life and affairs of this college after his graduation. He was once invited but declined to allow his name to be considered for the presidency of

City College.

Bowker's last 30 years were extremely active years, but they were conditioned by the hard fact of almost total blindness. From 1900 to 1933 he was without his evesight, but "he rose above this handicap and determined to live out his life as though no defect were there." That he was able to do this to a large extent is evident in the pages of Dr. Fleming's very fine biography of this militant liberal who was poet, author, editor, publisher, "literary ambassador at the Court of Fleet Street.' political reformer, business executive, inventor, and world traveler. "We have in this book," writes Allan Nevins in his Introduction, "much more than the portrait of an arresting personality and the record of a noble career; we have a vigorous study of some of the principal strands of American liberalism in a period which needed all the liberalism that it could find."-Jehn David Marshall, Clemson College.

Financing College Libraries

Financing Higher Education in the United States. By John D. Millett, New York, Columbia University Press, for the Commission on Financing Higher Education, 1952. xix, 503p. \$5.00.

This volume, which is called "The Staff Report of the Commission on Financing Higher Education," supplements the general report of the Commission, Nature and Needs of Higher Education, by presenting a summary of the information, gathered through seventeen research projects undertaken by members of the Commission. The book is divided into four major sections, covering the objectives. costs, sources of income, and possibilities for the future financing of higher education. There can be no doubt of the importance of the information gathered here, although it might be questioned whether conclusions based largely on statistics covering a decade of depression and a decade of inflation (most of the 82 tables present comparative figures for 1930, 1940 and 1950) are sufficiently soundly established.

But our concern here is particularly with the section devoted to library expenditures. These four pages (122 to 126) are perhaps not out of proportion to the space devoted to other aspects of college and university finances, but it is unfortunate that they are devoted almost wholly to consideration of the problem of the proper size of the book collections and are permeated by an apparent dislike of librarians, a scolding tone found nowhere else in the volume. From the first paragraph, which concludes "again and again at the institutions we have visited we have found dissatisfaction with and confusion about the library services of higher education" to the last "it is safe to predict that library operating costs will grow as one of the important expense problems of both colleges and universities," there is hardly a word of recognition that librarians have been at all concerned with the costs of operation.

Let us first consider the remarks on librarians. "Librarians constitutionally hate to throw anything away. . . . They are always chagrined when they cannot at once produce what is wanted." Since the two main purposes of a library are the preservation and the making available of books we may, for the moment, allow this impeachment and admit that when we cannot do what we exist to do, we feel some chagrin. "Librarians rate the importance of their jobs and examine their salary scale in the light of the size of their book collections, the number of their employees and their total expenditures." (If you prick us, do we not bleed? If you tickle us, do we

not laugh? If you poison us, do we not die? And if you wrong us, shall we not revenge?") Wherein do we differ here from deans, college presidents, or executive directors of such commissions as the present one? "The librarian [sic] profession as such puts little emphasis on economy; the pressure comes from college presidents and deans when they make up the annual budget." Since in the decade 1940-1950 the proportion of the educational budget devoted to libraries declined by four tenths of one percentage point while the proportion devoted to administration increased by exactly the same amount, it seems as if the administrators put the pressure on the libraries to take it off themselves.

But we should consider Dr. Millett's various points seriously. Although the library expenditures of the institutions investigated doubled from 1930 to 1940 and increased nearly three times from 1940 to 1950, the expenditures per student for these dates were \$9.59, \$13.54, and \$22.35. When these figures are expressed in terms of constant 1940 dollars, so as to show the effect of the changes in the general price level, they become respectively \$8.49, \$13.54 and \$12.68. Although the libraries have not kept pace with rising costs during the last decade, it is impossible to tell whether service to the library users has suffered or not on the basis of such a crude overall figure. Library meetings throughout the decade have devoted a great deal of time to consideration of various economies in operation and if some part of this talk has been converted into action, the slight reduction in real expenditure may mark an actual increase in service.

Dr. Millett recognizes the importance of the library in the general educational program and elsewhere in this work notes "the extensive browsing and the wide reading now indispensable to a liberal education." theless he has "found general agreement as a rule of thumb that a 'good' liberal arts college ought to operate with a book collection of under 100,000 volumes, many of which would be duplicates," and devotes a full page to urging the weeding of collections. This is of course not new to college librarians, many of whom have had regular weeding programs in operation for years. It does no harm to have the need of weeding emphasized by an outside observer, however, and this may help to make us more aware of the problem.

Whether the optimum size of a college library should be 25,000, 100,000, or more, however, must be determined by the methods of instruction in the particular institution. A college with a vigorous program of senior theses will require many more books than one devoted to an education based on classroom instruction. The emphasis given to faculty research and publication will also exert pressure on the size of the library. To hold to any figure means, in the long run, discarding an early volume of a periodical for every current volume added-a program not apt to meet with much encouragement from either librarians or faculty members. As Branscomb says in Teaching with Books, "An arbitrary limit to a college library fixed at a point which involves eliminating all except the immediately active material seems to create more problems than it solves. Discarding should be as constant and as normal a process as additions, but it would seem wiser to let this be determined by the uselessness of the material or its availability in a nearby institution rather than by a determination to keep the library small."

The Lamont Library at Harvard is given deserved words of praise, although whether the fact that the students "receive little reference . . . assistance," if it is a fact, is praiseworthy might be debated. Some recognition of the existence of the Widener Library next door as an influence on the type of collection and service given at Lamont might be expected if this is held up as an example for other college libraries.

The particular problem of the university library is the gigantic growth of research collections. Acknowledgement of the efforts to meet this problem by cooperative activities, the Farmington Plan, and the various deposit centers is made, although a fuller description of the Midwest Inter-Library Center is given in the chapter dealing with institutional cooperation. The efforts of libraries to reduce both acquisition and storage charges by the use of microfilms and microcards are dismissed as "minor experiments."

Attention is drawn to the doubling of library collections every twenty years. "If this were to continue unchecked, and if much more income is not provided universities, they will soon be in the position of having to drop one or two professors each year in order to keep up the library. This is an obvious absurdity." This apparently is a paraphrase from

K. D. Metcalf's "Universities Libraries Face the Future" (Library Quarterly 22: 6-7). ". . . In our libraries we have a section of our universities that tends, year in and year out. in good times and bad, to increase in cost geometrically, while the rest of the institution grows arithmetically. It is obvious that this cannot go on without the library's taking an ever increasing percentage of our total resources. That, expressed in other terms means that . . . each year . . . professors will have to be dropped so that the money from their salaries can be spent for library purposes." The nub of the matter here is whether library costs increase geometrically while university resources increase arithmetically. If total library expenditures are by 1950 only 3.4 per cent of the total educational expenditures, such a process cannot have gone on for long. The experience of my own institution, shown on the following table, does not indicate any such discrepancy between the growth of the library and the growth of the college as a whole. Each tended to double every decade until the depression and each has roughly doubled in twenty years since. Is the long run experience of other institutions different? Dr. Millett concludes his book with a cautious optimism about the future support of higher education. Is there reason to be less optimistic about the future support of the libraries in this field?

that costs have increased much more rapidly. Has this been true for a century or more? Have library costs in the past century increased more rapidly than general university expenditures? Has the increase in costs been equally distributed among the service branches. the technical processes, the cost of books and periodicals, or are there discrepancies among these parts of the library budget? How far are the increased costs a reflection of additional services and a more adequate acquisition policy, and how far are they a reflection of higher salaries and higher book prices? If we can secure answers to such questions we would really begin to know something about the financial aspects of our college and university libraries. The figures may be impossible to obtain over very many years, but I hope some library school candidate will make the attempt .- Wyllis E. Wright, Williams College Library.

Lexikon des Buchwesens

Lexikon des Buchwesens, Herausgegeben von Joachim Kirchner. Stuttgart, Hiersemann Verlag, 1952. Vol. I. 405 p. DM28.00. Libraries which were so unfortunate as not to have purchased the three volumes of the Lexikon des gesamten Buchwesens (1935-

1937) edited by Joachim Kirchner and the late Karl Löffler have had a difficult time lo-1922 1032 1942 1952 \$413,858 \$825,020 \$924,068 \$1,767,285 \$225,159

51,206

5.5

\$58.66

67,014

3.8

1,057 \$63.40

39,307

4.8

809

\$48.59

field of the financial aspects of higher educa- tion and one cannot criticise an author for writing his own book. Nevertheless, a study of the brief remarks on library finances raises many questions which need to be considered. The only statistics dealing with any consider- able number of libraries over an extended period of time with which I am acquainted are those which show the growth of book
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are more winen and the Francis of noon
stock and indicate a widespread tendency to
double every sixteen to twenty years. The
figures given for two decades by Dr. Millett,
as well as those cited from Williams, suggest

Total institutional expenditure \$107,313

Library expenditure

Number of students

Library costs per student

Percentage

1002

4,659

4.3

390

\$11.95

1912

9,195

4.1

533

\$17.25

17,271

4.2:

587

\$29.42

cating a copy, and then only at a price of around \$75.00. The answer to this problem has been provided in the form of a new edition by Kirchner with a slight changed title and a somewhat more modest format. However, the editor has undertaken such extensive textual revision that the term "second edition" seemed inapplicable, and accordingly he has even changed the title.

While the present work contains substantially the same information that is in the earlier one, the changes are obvious. For example, the articles on Chinese printing and book trade, Indian and Indonesian book trade

are up-to-date as of October 1952. The bibliographies include books and articles published as late as 1951, although Kirchner does not seem to have access to complete files of all the more important American, English, and Scandinavian books and journals published in the field of the book arts during the last decade and a half.

The articles on libraries and librarianship have been restricted to a few comprehensive historical surveys, and the articles on palaeography have been cut down considerably. Certain other fields such as journalism, library architecture and administration, and history of writing have been eliminated. The many entries under cities in the Lexikon des gesamten Buchwesens have been largely eliminated and the information included in the articles under the names of countries and provinces (although there are no entries under any states of the American republics). Bibliographies, in general, are somewhat smaller; but in a work of this sort selection is the most important element in giving additional references. It is unfortunate that articles are not signed, but Kirchner states there are "important reasons" for omitting names of authors. The list of his collaborators in the preface is a sufficient guarantee of the reliability of the work.

Kirchner has done very well by the world of the book in America and seems to have covered its most important aspects. His statement that the John Carter Brown Library is "in the University Library in Providence" (p. 110) is misleading, and the Huntington Library was not given to the State of California, (p. 337). Kirchner is not always meticulously careful with his accents in such languages as Portuguese and Icelandic, and there are some misprints. For example, read Capella on p. 44 where the name Martianus Copella appears; 1820, not 1920, as the date of the founding of the University of Michigan (p. 18); and 1951, not 1931, as the date of publication of Dagher's directory of libraries in the Near East.

Such criticism, however, is hardly justified from an English-speaking person. We should reserve any critical comments until we have produced a work such as the Lexikon des Buchwesens or the great Nordisk Leksikon for Bogvaesen (now as far as "Litografi") being published by the Nyt Nordisk Forlag Arnold Busck in Copenhagen.

The second and concluding volume of the

Lexikon des Buchwesens will be available later this year.—Lawrence S. Thompson, University of Kentucky.

Government Information

Government Information and the Research Worker: Lectures delivered at a Vacation Course of the University of London School of Librarianship and Archives in April, 1951. Ed. with an Introduction by Ronald Staveley. B.A., F.L.A. London, Library Assoc., 1952. vi, 228p. 24s.

For a long time the users of British government publications have found it easy to locate clearly written and accurate descriptions of Parliamentary Papers, Statutes, Gazettes, etc., but when it came to finding descriptions of the non-parliamentary publications of ministries and other administrative bodies very little satisfactory material seemed to be available. Therefore this new book which is largely, though not exclusively, devoted to non-parliamentary publications should be welcomed by students, librarians and research workers. Though not a systematic manual nor complete in its coverage, it will answer many of the questions concerning the functions of government departments and the series they publish which naturally arise in the minds of readers and it makes an excellent addition to a small group of works1 which every general research library should contain.

Five general lectures furnished an introduction to this series. The first by E. M. Nicholson, secretary, Office of the Lord President of the Council, was on "The Government and Research." In the second, Dr. W. R. Francis of the Department of Scientific and Industrial Research described "the government agencies and departments in which scientific research is undertaken and sponsored." These first two lectures are not printed in this book because the information they contained is adequately treated in a 1951 Treasury publication entitled Government Scientific Organization in the Civilian Field: a Review Prepared For the Lord President of the Council by the Advisory Council on Scientific Policy. The third of these preliminary lectures was on

¹ E.g., Ford, Percy, and Ford, G. A Breviate of Parliamentary Papers: 1917-1939. 1951; Harrocks, Sidney. The State as a Publisher. 1952 (Library Association Pamphlet no. 10); Temperley, Harold, and Pinson, Lilliam M. A Century of Diplomatic Blue Books: 1814-1914. 1938. "His Majesty's Stationery Office" given by Mr. Cox, the deputy comptroller. It furnishes an excellent brief account of the policies and activities of this chief publisher and distributor of British official documents. The next dealt with the plans and publications of "The Interdepartmental Committee on Social and Economic Research." The concluding lecture of the general series by Sir Hilary Jenkinson on "The Problem of Elimination in the Records of Public Departments" bears a close relationship to the information supplied by subsequent papers on the unpublished data in departmental files which may interest research workers.

Twenty-two chapters, each dealing with the publications of a separate ministry, board, office or council, follow these preliminary chapters. No two are exactly alike but most of them begin with a short history of the administrative body, followed by an account of its functions and duties and the publications which grow out of these. Series, periodicals, reports and other outstanding separate publications are treated. Important "command papers" including the reports of royal commissions, select committees and annual reports are mentioned and sometimes described. Most of the authors who lectured on the works published by individual departments were librarians, and in response to a request by the organizers of this course they tell whether their libraries are open to ordinary students and investigators and what unpublished records, statistical material and other research data their departments contain which would be available for research purposes. latter type of information would be more frequently useful to the British than to the American student.

While the above description is fairly accurate, it represents the more informative and detailed report. The lectures given were somewhat uneven in quality, some giving a good deal of information on publications, others very little. Those on the Ministry of Agriculture and Fisheries, the Medical Research Council, the Department of Scientific and In-

dustrial Research and the Ministry of Supply give less data on publications than one might desire. On the other hand several chapters, including those on the Ministries of Health, Fuel and Power, Town and Country Planning and that on the Colonial and Commonwealth Relations Offices, give excellent accounts of organization and publications and should be most helpful to investigators and students. Some of the newer agencies such as the Information Division of the Treasury, the Social Survey and the Technical Information and Documents Unit of the Board of Trade are well described and their publications noted.

Only civil departments are treated—none of the publications of the Admiralty, the War Office, the Air Ministry or the Ministry of Civil Aviation receive attention. Not even the long series of the Aeronautical Research Council are included. The only publications of the Geological Survey which are given are the new maps it is contributing to the National Atlas. No historical publications are treated and the 1951 Census, taken in the same month in which the Course convened, is not described.

The blue cloth binding lettered in gold is attractive but the cover already shows signs of coming loose and will not stand up under continuous use. The print is readable except in the chapters in which detailed lists of publications have been added by the lecturers in the course of revision of their addresses. These lists are in very fine print and are not too easily read.

In conclusion it may be stated that one of the strongest points in favor of the work is its unquestionable authority. Each author is an officer of the governmental unit for which he speaks and has an intimate, first-hand acquaintance with its organization, activities and publications. No general compiler of a more systematic manual could possibly know all these bodies so well. For this reason the book would still continue to be valuable even if a more systematic manual should later become available.—Rose B. Phelps, University of Illinois Library School.



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